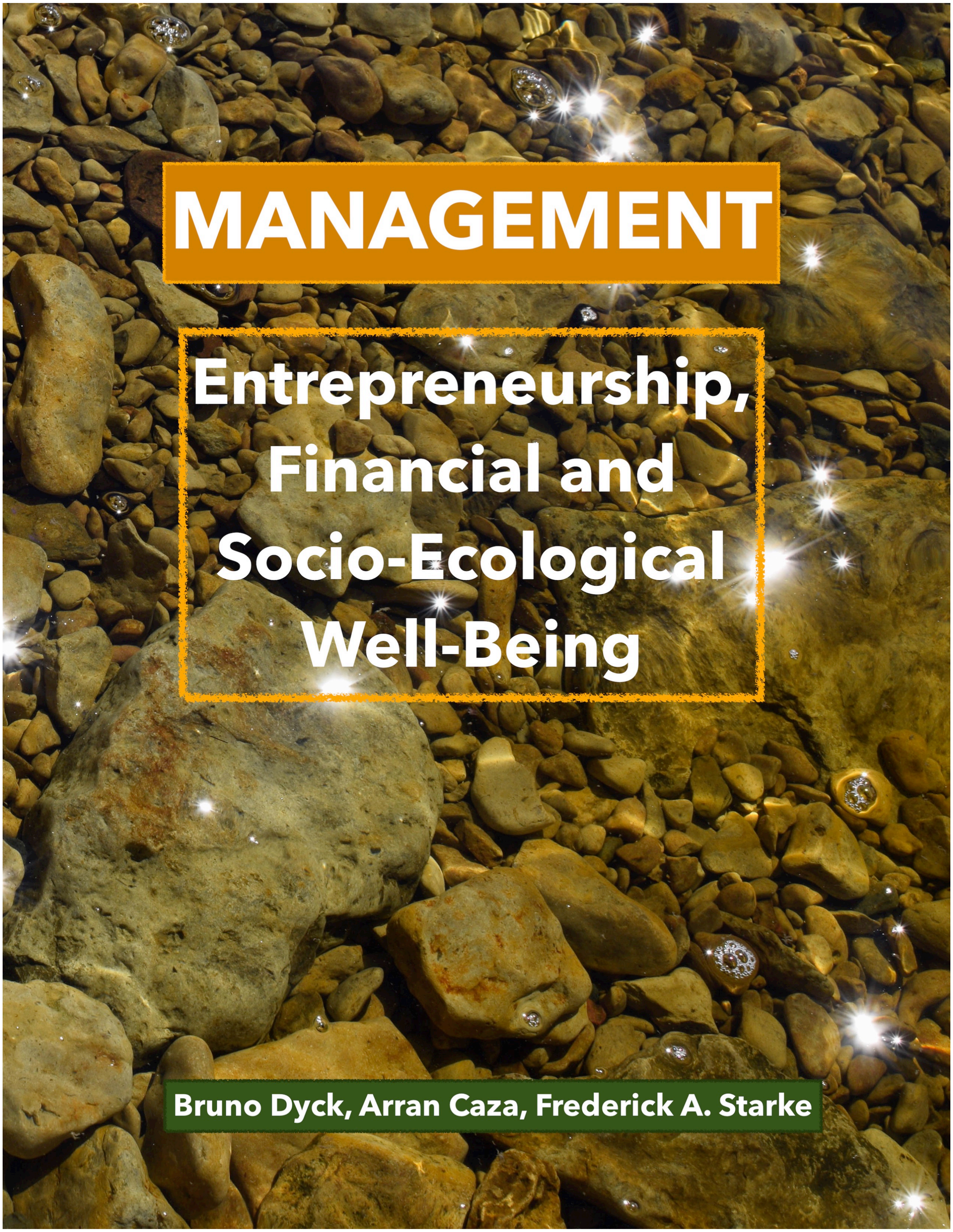

MANAGEMENT

Entrepreneurship, Financial and Socio-Ecological Well-Being

Bruno Dyck, Arran Caza, Frederick A. Starke

KEY FEATURES

- **Each chapter describes three approaches to management**

  Financial Bottom Line (FBL) management

  Focuses on maximizing financial well-being

  Has been the dominant approach to management in the past century

  Triple Bottom Line (TBL) management

  Focuses on maximizing financial well-being via sustainable development

  Has become a dominant approach to management in the past twenty years

  Social and Ecological Thought (SET) management

  Focuses on enhancing socio-ecological well-being ahead of maximizing profits

  Poised to become the dominant approach (especially among Millennials)

- **Emphasis on entrepreneurship in each chapter**

  Encourages readers to apply management concepts in organizational settings

- **Pedagogical benefits**

  Learning multiple approaches improves critical and ethical thinking

MANAGEMENT:
ENTREPRENEURSHIP, FINANCIAL AND SOCIO-ECOLOGICAL WELL-BEING

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Arran Caza
Frederick A. Starke

Sapajo Publishing

"This book is dedicated to our students and readers; may it help and inspire you to become truly good managers."

- Bruno, Arran and Fred

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BRIEF CONTENTS

KEY FEATURES OF THE BOOK

Authors: The three co-authors are well-published scholars, textbook writers, and teachers. In total they have written 10 textbooks (over 30 editions), over 100 scholarly papers (including over 20 publications on the *Financial Times 50* list), and received teaching awards. Authors also developed the test bank and Instructors' Manual.

Affordability: Student-friendly pricing (starting at $25 for the e-book edition).

Format: In order to optimize the readability of the book:

- each chapter is about two-thirds the length of a regular textbook chapters (while still containing the same core concepts that are covered in other textbooks)
- each chapter ends with an entrepreneurship feature that challenges students to apply the ideas from the chapter to managerial practice (of special interest for Millennials)
- the font size and format of the book have been designed with readability in mind
- each chapter has an opening preview/summary that readers can refer to as they read

Relevance: Each chapter describes and compares three approaches to management:

Financial Bottom Line (FBL) management
- management that maximizes financial well-being
- the dominant approach to management in the past century

Triple Bottom Line (TBL) management
- management that supports sustainable development, where organizations enhance their financial well-being by reducing negative social and ecological externalities
- has become a dominant approach in the past twenty years

Social and Ecological Thought (SET) management
- management that enhances socio-ecological well-being ahead of maximizing profit
- poised to become the dominant approach to management (esp. among Millennials)

Pedagogical benefits: Learning about multiple approaches to management has been empirically shown to enhance critical thinking ability, reduce emphasis on materialism and individualism, and contribute to perceived improvement in ethical thinking.

DETAILED TABLE OF CONTENTS

MANAGEMENT:

ENTREPRENEURSHIP, FINANCIAL AND SOCIO-ECOLOGICAL WELL-BEING

Preview and Summary of Chapter 1

A. Why learn about management?

- develop skills to become a manager
- enable improved working relationships with bosses
- promote understanding of the role of managers in society
- improve your ability to create value and to capture value
- nurture self-understanding

B. The nature of management

The *what* of management: Four generic functions of management:

- Planning: Identifying organizational resources, goals, and strategies
- Organizing: Designing systems and structures to enable meeting goals/plans
- Leading: Influencing others to help meet the organization's goals
- Controlling: Ensuring that members' actions are consistent with the organization's standards/values

The *why* of management: Three types of "effective" management

FBL management, based on the financial bottom line, focuses on maximizing an organization's financial well-being.

TBL management, based on the triple bottom line, seeks to enhance an organization's financial well-being by reducing its negative social and ecological externalities.

SET management, based on social and ecological thought, seeks to enhance social and ecological well-being while maintaining financial viability.

C. The benefits of learning about three types of management: FBL, TBL, and SET

- enhances critical and ethical thinking

D. Entrepreneurial management

- entrepreneurs want to be their own boss, make the world better, and make money
- different types of entrepreneurs

CHAPTER 1:
INTRODUCTION TO MANAGEMENT

Learning goals

After reading this chapter, you should be able to:

1. State five reasons why the study of management is important.
2. Describe the four functions of management.
3. Understand the three main approaches to effective management.
4. Describe the benefits of studying three approaches to management.
5. Identify three main reasons that people start new businesses.
6. Distinguish between different types of entrepreneurs.

OPENING CASE:
SEEING JEWELS WHERE OTHERS SEE DESPAIR

When Kallie Dovel first traveled to Uganda in 2007, she did so to put her nutrition degree into practice by helping orphanages in Uganda that were recovering from the aftermath of Joseph Kony's reign of terror, which had created child soldiers and brides. She never dreamed that she would eventually start a company that would become a million dollar brand.[1]

While in Uganda, Dovel made two important observations.[2] First, the parents of many of the children in the orphanages were still alive, but had placed their children in orphanages because they lacked the economic means to care for them. In other words, the orphanages were a symptom of a larger problem. Second, Dovel met some women who were using recycled paper to make beautiful beaded jewelry, which they wanted her to sell when she travelled back to the U.S. She took a full suitcase home, and sold the jewelry at craft fairs. Dovel realized that that if she could do this on a larger scale, she might be able to help impoverished Ugandan single mothers.

So, Dovel and four of her college friends who were eager to make the world a better place—Allie Swanson, Anna Toy, Brooke Hodges, and Jessie Simonson—started a company called *31 bits.* She returned to Uganda in 2008 to work with Ugandan women and to set up the operation, while her four friends focused on selling.

"The rest of us began our last year of college with a new agenda: selling jewelry anywhere we could. We had no idea what we were getting ourselves into. We were a misfit group of dreamers, artists, and socialites…not business people. We didn't know the first thing about starting a business. By day we were college students, but the evenings were filled with studying fashion, marketing, and development work. We discovered two things. Firstly, we didn't want to be just another charity selling key chains and t-shirts. We were determined to create a fashionable product that customers would purchase because they actually liked it. Secondly, we knew the artisans needed a lot more than a paycheck. They needed education, health care, and counseling. They needed to be cared for physically, mentally, and emotionally. They needed a way to be whole again." [3]

"We started small, selling at school events and craft fairs. Eventually we started an online store and a wholesale program. The road was rocky and the sleep was short, but five years later, we're in over 300 stores and have shared our story with hundreds of thousands of people." [4]

While her four partners were learning the business of selling jewelry at craft fairs and on-line, Dovel was developing the program in Uganda. The program is four years long, and provides Ugandan single mothers with basic business training and mentorship, language and numerical literacy, and some English. They earn a salary that is equivalent to a local school teacher. The program is financed by the sale of the jewelry made by the women. In its first year, the program employed six Ugandan women, and six years later it had grown to 170 women. The idea of using recycled paper to empower women has been quite compelling, and *31 bits* has grown about 20% per year. Within ten years, it had 9 full-time staff in the U.S. and 14 full-time employees in Uganda.[5]

"But the story doesn't stop there. In 2016, we expanded our program to Indonesia where our story continues to unfold. We're partnering with a Balinese workshop where we are putting a modern spin on their traditional techniques of making brass jewelry. By giving artisans access to the global market, we are able to provide ethical working conditions and fair and consistent incomes, while giving our customers an opportunity to shop a whole new line of products."[6]

This book is all about management. It is written for people who want to better understand what it means to be an effective manager. In this first chapter, we start by explaining why it is important to learn about management. We then describe what management is all about and what managers do. Next, we introduce three different approaches to management, which we will refer to continuously throughout the rest of the book. The first approach will be of interest to those who want to learn about the classic ideas related to maximizing an organization's financial bottom line. The second approach describes the current emphasis on a triple bottom line approach, where managers seek to enhance financial well-being by reducing negative social and ecological externalities. The third approach describes what management looks like when the primary organizational goal is to optimize social and ecological well-being instead of profit. In this approach, financial viability is important but it is not the top priority and it does not need to be maximized. The final section of this chapter, as with every chapter in this book, will highlight the implications of the chapter material for entrepreneurship theory and practice.

WHY LEARN ABOUT MANAGEMENT?

Learning about management is valuable for at least five reasons. First, it will increase your opportunities to be offered a job as a manager. Managers must develop strong **technical skills**–*expertise in a particular area like marketing, accounting, finance or human resources*--and strong **social skills**–*abilities in getting along with people, leadership, helping others to be motivated, communication, and conflict resolution*. But technical and social skills by themselves are insufficient to get promoted into management. Rather, it is strong conceptual skills that determine who gets promoted. **Conceptual skills** *refer to the ability to think about complex and broad organization issues*. This is the focus of this book: to introduce and develop a solid conceptual framework of what management is all about. The book will also help you to develop human skills and to develop some technical skills in areas like strategic management.

Having strong conceptual skills is key to getting promoted.

Second, the better you understand the work of your own managers, the easier it will be for you to get along with them. This will make your work experience less stressful and more enjoyable, and should also help to make your organization run more smoothly.

Third, learning about management will help you to better understand the important role that managers play in our society. That, in turn, will help you deal with the various organizations you come into contact with on a daily basis. The knowledge provided in this book is relevant for all kinds of organizations: large or small, profit-oriented or non-profit, local or international, and traditional or virtual. It is also relevant at every level of management in organizations, including:

- **first-line supervisors,** *who manage the work of organizational members that are involved in the actual production or creation of an organization's products or services;*
- **middle managers,** *who manage the work of first-line managers and others;* and

- **top managers,** *who have organization-wide managerial responsibilities, such as Chief Executive Officers (CEOs), Vice-Presidents, and Board Chairs.*

Of course, the nature of managerial work changes depending on the level and type of organization. What a manager does may also change depending on the size of the organization, the kind of technology it uses, its location, its culture, and so on.

Fourth, studying management can help you to improve the ability of organizations to create and capture value. All organizations need to engage in **value creation,** *which means offering goods and services that are valued by society,* and financial **value capture,** *which means acquiring part of the financial benefits associated with the value being created.* The book will enhance your ability and knowledge to create value, especially in regards to developing new products and services within an organization or starting a new organization. It will also teach you different ways to think about what value capture actually means. For example, should business always seek to maximize profits and shareholder wealth, or is it sufficient to remain financially viable in order to enhance opportunities to create socio-ecological value?

Finally, the study of management is important because it fosters self-understanding. By understanding management, we get a better sense of the values and forces that are shaping us as persons and as societies. According to prominent management philosopher and scholar Peter Drucker, management "deals with people, their values, and their personal development … management is deeply involved in moral concerns."[7] Thus, one goal of this book is to help you develop a rich understanding of how different approaches to management are based upon different sets of values. This will also help you to think about contemporary issues like personal and corporate corruption, climate change, downsizing, income inequality, and decisions to move jobs overseas.

THE NATURE OF MANAGEMENT

Because we live in a time when organizations dominate our lives, most people have at least some idea of what managers do. We generally think of a manager as "the boss" who is "in charge." A manager has status, power, and influence. A manager gets to tell others what to do, and usually earns more money than others. Managers also have a chance to make the world a better place and to make a difference in the lives of others, both inside and outside of their specific organization. Even though managers are commonplace in our society, most people are not able to provide a clear definition of what management is. And without knowing the hallmarks of management, it is difficult to become a successful manager, a good follower, or to understand the role of management in our society.

Management *is the process of planning, organizing, leading, and controlling human and other resources towards the effective achievement of organizational goals.*

A definition of management commonly has two components. **Management** *is (a) the process of planning, organizing, leading, and controlling human and other organizational resources towards (b) the effective achievement of organizational goals*. The first part of the definition looks at the *what* of management (i.e., the four functions that managers perform), and the second part looks at the *why* of management (the meaning of success and effectiveness). We will look at each component in turn.

THE *WHAT* OF MANAGEMENT: THE FOUR FUNCTIONS

Planning, organizing, leading, and controlling are the four main functions of management. These functions were first identified by Henri Fayol[8] over a century ago, and are still commonly used as the organizing framework for management courses and textbooks throughout the world. These four management functions are also evident in the basic definition of an organization: An **organization** is *a goal-directed, deliberately-structured group of people working together to provide specific goods and services.* Or, in less technical jargon, management involves deciding what goods and services an organization will provide (planning), arranging the necessary resources (organizing) and helping people to enable this to happen (leading), and overseeing the whole process (controlling).

Managers play a variety of roles in the drama that is the improv theatre of organizational life.

Although Fayol's four functions of management continue to serve as the *conceptual* framework most often used to describe management, a famous study by Henry Mintzberg helps to better understand what managers *actually do*.[9] Mintzberg literally followed managers around for weeks on end and took careful notes on what they did every minute of each day. Rather than the orderly and thoughtful picture that might be implied by Fayol's four functions, Mintzberg found that managers' workdays are fragmented (the average time a manager spends on any activity is less than 9 minutes), have a lot of variety, and move at a relentless pace. Whereas Fayol's functions might imply that managers spend a lot of their time at their desks, Mintzberg found that deskwork accounts for only 22% of managers' time.

Mintzberg's study suggests that managers play a variety of roles in the drama that is the improv theatre of organizational life. In particular, he suggests that managers play ten roles that are organized into three categories:[10]

- interpersonal roles (leader, liaison, and figurehead);
- decisional roles (resource allocator, negotiator, entrepreneur, and crisis handler);
- informational roles (monitor, disseminator, and spokesperson).[11]

Table 1.1 provides the definitions of and identifies areas of overlap between of Fayol's four *functions* and between Mintzberg's *roles*. In the following paragraphs we describe the four functions and how each of Mintzberg's ten roles can be associated with a specific function.[12]

Table 1.1: Definitions of and overlap among management functions and roles

Fayol's management functions	Mintzberg's managerial roles
1. Planning: *deciding on an organization's goals and strategies, and identifying the appropriate organizational resources that are required to achieve them.*	**Entrepreneur role:** *proactively and voluntarily initiating, designing, or encouraging change and innovation.*
	Negotiator role: *making incremental changes related to plans and resources.*
	Disseminator role: *transmitting to members of one's organizational unit information that has been gathered from internal or external sources.*
2. Organizing: *ensuring that tasks have been assigned and a structure of organizational relationships created that facilitates meeting organizational goals***.**	**Resource allocator role:** *distributing all types of resources (e.g., time, funds, equipment, human resources, and so on).*
	Liaison role: *building and maintaining a good structure of information contacts beyond the boundaries of a manager's specific work unit.*
3. Leading: *relating with other members in the organizational unit so that their work efforts contribute to the achievement of organizational goals.*	**Leader role:** *communicating with subordinates, including motivation and coaching.*
	Spokesperson role: *transmitting decisions and other information up, down, and across an organization's hierarchy, and/or to the general public.*
	Figurehead role: *representing an organizational unit in a symbolic or ceremonial capacity.*
4. Controlling: *ensuring that the actions of organizational members are consistent with its values and standards***.**	**Monitor role:** *acquiring internal and external information about issues that can affect the organization.*
	Crisis handler role: *taking corrective action when things are not going as planned.*

Planning

Planning means deciding on an organization's goals and strategies, and identifying the appropriate organizational resources that are required to achieve them. The planning function draws the most attention to managers' hierarchical authority. Managers call meetings and set the agendas as to what will be discussed at those meetings. Managers ensure that departmental goals and strategies are developed, which often includes planning for the exchange of resources with key suppliers and customers. Managers are held responsible for their organizational unit's decisions, goals, and strategies.

Mintzberg's study suggests that planning can focus on fine-tuning a firm's current operations, or on developing strategic organizational changes. For example, the negotiator role often involves making incremental changes to ongoing plans and resources. In this role, a manager represents the organization in major negotiations affecting the manager's area of responsibility (e.g., negotiation of a union contract, negotiating the fee that a consulting company will be paid, negotiating the price to be paid for a new acquisition, etc.). In the disseminator role, managers transmit information to members of their own organizational unit; this information may have been gathered from internal or external sources. Such information is essential to the planning function, and includes sending memos, scheduling and attending weekly staff meetings, re-telling the myths and anecdotes that represent an organization's culture, and relaying information from top management.[13]

Perhaps the most far-reaching role in Mintzberg's framework is the entrepreneur role, which involves proactively and voluntarily initiating, designing, or encouraging change and innovation. Managers may delegate parts of the implementation process to others, but will typically oversee the overall process and retain the authority to make final decisions. The entrepreneurial role, which is evident in all four managerial functions, is of growing importance in the real world, and will play an important role in this book.

Organizing

Organizing means ensuring that tasks have been assigned and a structure of organizational relationships created that facilitates meeting organizational goals. Organizing has to do with the structures and systems that managers establish and maintain. This includes developing an **organization chart** *which describes the reporting relationships and authority structure of the organization*, deciding on the approach to departmentalization, choosing the technology that the organization uses, the physical lay-out of a factory or office space, budgets, human resource policies, and so on. When senior managers are asked about the most challenging part of their job, they often talk about implementing changes to organizational structures and systems.

Two of Mintzberg's managerial roles are most closely related to organizing. First, the resource allocator role is defined very broadly, and involves the distribution of all types of resources (e.g., time, funds, equipment, human resources, and so on). Managers oversee the organizational structure that members work within, such as what sort of departments an organization has and how budgeting processes are used to allocate financial resources. Second, organizing also requires coordinating the use of resources with external stakeholders. **Stakeholders** *are parties that have an interest in what an organization does because they contribute resources to the organization and/or are affected by its operations*. This is accomplished via the liaison role, which includes building and maintaining a good structure (network) of information contacts beyond the boundaries of a manager's specific work unit. It also includes activities like meeting with bosses and other managers at the same level within the organization, and dealing with competitors, suppliers, and customers.

Managers spend 75% of their time interacting with people.

Leading

Leading refers to relating with other members in the organizational unit so that their work efforts contribute to the achievement of organizational goals. Leading is often the first function that comes to mind when people think about management, because it is the most obvious and visible face of management for most subordinates. Leading includes interpersonal skills in communicating with members, encouraging them, resolving interpersonal conflicts, fostering members' motivation, and so on.

Mintzberg found that on average managers spend 75% of their time interacting with people. The most important role here is the leader role, which includes virtually all forms of communicating with subordinates, including motivating and coaching. Most of the focus of the leader role is on face-to-face interactions, and includes activities like staffing, training, and motivating. The public face of leading is often seen in the spokesperson role, where the manager transmits information and decisions up, down, and across the hierarchy, and/or to the general public. Finally, the figurehead role highlights the important symbolic function that managers play for their organizational units. Organizational members pay special attention to their managers' behavior, taking cues from them regarding work, company values, and even their personal dress codes. The figurehead role is evident when a manager hands out a plaque for performance at an organizational banquet, is present at the ribbon-cutting ceremony for a new plant, or is interviewed by the media to announce a new organizational initiative.[14]

Controlling

Controlling means ensuring that the actions of organizational members are consistent with the organization's values and standards. Controlling can be very visible, such as asking members to punch in on a time clock to ensure they do not overstay their lunch hour. However, as described in subsequent chapters, the most effective controls are often less visible. These include professional norms, organizational culture, and the informal understanding employees have of the-way-we-do-things-around-here that characterizes each organization. This less visible activity of management is important because it determines the organization's identity, shapes the identities of individual members within the organization, and provides members with meaning in their jobs.

Mintzberg's roles draw attention to the fact that controlling includes both correcting things that are going wrong, and supporting things that are going well by providing positive recognition of good work. In the monitor role, a manager seeks internal and external information about issues that can affect the organization. This might include talking to members, taking observational tours in the organization, asking questions, reading newspapers, attending conferences to keep abreast of trends in the field, monitoring performance reports, and reading minutes from meetings. The crisis handler role requires taking corrective action when things are not going as planned. Often this includes unexpected difficulties (e.g., fire damage in a factory, loss of a major customer, or the breakdown of an important machine).

THE *WHY* OF MANAGEMENT: EFFECTIVENESS AND SUCCESS[15]

The second part of the definition of management focuses on ensuring that the four management functions are performed *effectively*. There is an old expression that distinguishes between efficiency and effectiveness, where efficiency refers to doing things right, and effectiveness refers to doing the right things. The idea of effectiveness draws attention to larger, meaning-of-life, and overarching goals that shape management. The question of what it means to be a "good" manager draws attention to the fact that managers, like anyone who makes decisions that affect other people, have *moral* obligations. What does it mean to be an effective or a successful manager? It depends on what criteria people use to evaluate success. In this book we will describe three different approaches for understanding managerial effectiveness. We call them Financial Bottom Line management (FBL), Triple Bottom Line management (TBL), and Social and Ecological Thought management (SET). Each approach is briefly introduced here, and more fully developed throughout the book.

Financial Bottom Line (FBL) management

FBL management *is characterized by its emphasis on maximizing an organization's financial well-being, which is typically achieved by appealing to individual self-interests*. For most of the past century "effective" management has been virtually interchangeable with "financially successful" management. This is particularly true when talking about business managers, where effectiveness has been measured primarily in economic terms. Jack Welch, the former CEO of General Electric, is an excellent example of the FBL approach.

Exemplary FBL manager: Jack Welch

Jack Welch, CEO of General Electric from 1981-2001 was named the "manager of the century" by *Fortune*, and was held up by *Business Week* as the "gold standard against which other CEOs are measured." Welch illustrates the dramatic difference that a manager can make in an organization. Under his leadership, General Electric (GE) experienced twenty consecutive years of dividend increases, a near-perfect record of ever-higher profits, and a remarkable 4,000% increase in share price. With Welch at the helm, GE became the first corporation to be valued at more than $200 billion, one of the most-profitable firms in the world, and "the model U.S. corporation."[16] Descriptions of Welch's approach to the four functions of management—planning, organizing, leading and controlling—have been found in management textbooks for years.[17]

First and foremost, Welch was seen as brilliant at strategic *planning* and decision-making. He was especially known for his decision rule that GE exit from industries where its divisions did not hold the #1 or #2 position in the market. This decision rule helped to established the tone for the decisions and goals that other GE managers set for their subordinates.[18]

Second, Welch was known for his innovations in *organizing*, especially for introducing "Work-Outs" throughout GE. Work-Outs are akin to "town hall meetings" where employees give grass-roots advice to their managers on how to cut costs and improve quality.[19]

Third, an influential *leader*, Welch was famous for his hand-written notes praising or prodding employees throughout the company: "'The biggest job I have is to let people know how I feel about 'em,' he once said. 'You gotta tell them you love 'em and you gotta kick 'em in the [butt] when they're not doing their job.'"[20]

Finally, he is known for establishing innovative systems to *control* people and information at GE. This is illustrated by GE's emphasis on "Six Sigma" which is "a disciplined methodology to relentlessly pursue higher quality and lower costs."[21]

FBL management is based on the idea that societal well-being is optimized when organizations maximize the creation of financial wealth, which occurs via managers maximizing organizational wealth under the assumption that individuals pursue their own financial self-interests.[22] This premise is consistent with the common interpretation of Adam Smith's (1776) metaphor of the **invisible hand** *which suggests that the good of the community is assured when every individual is permitted to pursue their own self-interested goals*.[23] Smith's logic is two-fold. First, when individuals maximize their own financial well-being then (regardless of whether or not they intend to) they will inevitably also maximize society's financial well-being.[24] Second, the invisible hand will work to protect the interests of everyone; Smith argued that even rich selfish landlords would pay their workers well, because the landlords would recognize that they were dependent on the workers who grow their food and care for their castle.[25]

"There is one and only one social responsibility of business: to use its resources and engage in activities designed to increase profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud."

Milton Friedman

Not only is FBL management effective according to this economic rationality, it is also deemed effective and good because it is ethical according to a popularized understanding of a moral-point-of-view called **consequential utilitarianism,** *which focuses on optimizing an action's rightness (and limiting its wrongness) as measured by its effect on the net overall happiness outcome for everyone involved*.[26] An organization is rightly ordered when its structures and systems are arranged in a way that maximizes everyone's net overall happiness. Because different people will have a different view of what constitutes happiness and satisfaction—for example, some people value vacationing, others value fine food, and others value supporting charity—in practice money is often used as a proxy for happiness (because people can use money to go on vacation, purchase fine food, or make donations to charities). Thus, in its simplified popular form, consequential utilitarianism suggests that ethical management strives to maximize a firm's financial outcomes. Milton Friedman, recipient of the 1976 Nobel Prize in economics, can be seen as a champion of an FBL approach to effectiveness. As the quote in the insert attests, Friedman's views are consistent with consequential utilitarianism and with the invisible hand.[27]

The FBL approach has been highly-valued, thanks to being associated with creating unprecedented financial wealth. However, the FBL approach is also being increasingly criticized for its shortcomings because it overlooks social and ecological well-being. This can be illustrated by the criticisms of Jack Welch, who was given the nick name "Neutron Jack" because of his practice of closing profitable divisions simply because they were not #1 or #2 in their industries. These actions left tens of thousands of people unemployed. Sometimes GE employees in this "perform or perish" climate were motivated to act illegally and unethically, perhaps in order to remain #1 and #2 in their industry. Under Welch, GE had a less-than-glowing record in terms of ecological issues; improperly disposed industrial wastes made GE public enemy #1 among environmentalists,[28] particularly for Welch's ten-year fight refusing to clean up the cancer-causing PCBs GE had released into the Hudson River.[29] Welch's GE was also plagued by issues related to workplace safety (excessive radiation in the workplace) and illegality (fraud in military contract procurement).[30]

Overall, FBL is facing increasing criticism because it is associated with (unintentionally) creating negative ecological and social externalities. **Externalities** *refer to positive and negative effects that organizations have on society but which are not reflected in their financial statements*. Recall that FBL is based on the "invisible hand" assumption that increasing financial well-being at the individual or organizational level will inevitably create positive externalities that enhance overall societal well-being. And indeed, countries whose businesses have the most effective FBL managers and businesses also tend to have a high GDP and good standard of living. However, as we shall see in later chapters, those same high-income countries also tend to deplete more than their share of environmental resources, and are living far beyond the carrying capacity of the planet, which is contributing to negative externalities related to climate change and the deterioration of ecological resources. For example, the negative ecological externalities of the world's businesses are estimated to be about $7 trillion per year.[31] In other words, business creates about $1,000 worth of ecological damage per year for every person on the planet, which is the same amount that the poorest half of the world lives on each year.[32] Moreover, the financial benefits of large businesses that create negative externalities are not spread evenly across

Businesses create about $1,000 worth of ecological damage per year for every person on the planet, the amount of money that the poorest half of the world lives on.

the globe; it is only the relatively wealthy who can afford to own shares in them. This contributes to the widening gap between rich and poor and related social problems. Observations such these have led to the development and adoption of an updated-and-improved approach to management, namely TBL management.

Triple Bottom Line (TBL) management

TBL management *is characterized by its emphasis on enhancing an organization's financial well-being while simultaneously reducing its negative socio-ecological externalities.* The TBL approach is based on the assumption that managers can find win-win-win solutions that simultaneously benefit profits, people, and the planet.[33] TBL management pursues **sustainable development,** *which means "meeting the needs of the present generation without compromising the ability of future generations to meet their needs."*[34] From a TBL perspective, sustainable development means simultaneously pursuing economic prosperity, social equity, and environmental quality.[35] Jeff Immelt, who took over from Jack Welch as GE's CEO in 2001 and served to 2017, is a great example of TBL management.

Exemplary TBL manager: Jeff Immelt

Jeff Immelt has been regularly listed on the "World's Best CEOs" lists, though his approach to the four functions of management differs from Welch. First, in terms of *planning*, Immelt was one of the first CEOs of a large business to recognize the importance of climate change, which prompted him to make bold plans and strategic decisions designed to increase GEs profits by addressing ecological and social issues.[36] For example, in 2005 Immelt agreed to pay for cleaning up the PCBs from the Hudson River,[37] and he launched GE's well-known Ecomagination initiative. Since then, the over $12 billion invested in Ecomagination has generated $180 billion in revenues, while reducing greenhouse gas emissions by 32% and saving GE $300 million.[38]

Second, in terms of *organizing* and arranging resources, GE purchased the largest wind-turbine producers in the U.S. in 2002, and its largest solar producer in 2004. Immelt also began to connect the dots between teams within GE who were working independently on green technologies, ranging from fuel-efficient jet engines to energy-saving refrigerators and dishwashers.[39]

Third, Immelt has been an influential *leader* both within GE and beyond its borders. For example, when he first brought his plans for Ecomagination to the 35 top managers at GE, about 30 were opposed. Immelt acknowledged the concerns of the naysayers, but proceeded with his plans anyway, commenting that: "There's about five times a year with that group that I say, 'Hey guys, here's where we're going, get in line.' If you did it six times, they would leave. And if you did it three times, there'd be anarchy."[40] Immelt also advocated for

GE to take a strong stand on climate change, including publicly endorsing carbon pricing. Lee Scott, the then-CEO of Walmart, called Immelt "the Pied Piper of sustainability." When President Trump announced that the U.S. would withdraw from the Paris Climate Accord, Immelt tweeted: "Disappointed with today's decision on the Paris Agreement. Climate change is real. Industry must now lead and not depend on government."[41]

Finally, Immelt has also set clear *control* standards. For example, in order to qualify as an Ecomagination product, it must offer customers quantifiable benefits in terms of both financial and ecological well-being. Seventeen products initially qualified, including a locomotive that reduced greenhouse gas emissions by 50% and fuel costs by 15%.[42]

TBL management recognizes that the classic FBL approach ignores negative socio-ecological externalities created by business. In contrast, the TBL approach promotes the view that by attending to and reducing these externalities organizations can actually further enhance their financial well-being. In short, the TBL approach draws attention to the business case for sustainable development. A **business case** *is a justification, often documented, that shows how a proposed new organizational initiative will enhance an organization's financial bottom-line.* Often a business case also demonstrates that the financial resources invested in the new initiative will yield higher returns than if they were invested elsewhere.[43] Walmart has become a leading example of TBL management by showing, for example, how decreasing the packaging of the products it sells can save money and the environment, and how LED lighting and solar panels can reduce energy costs and fossil fuel greenhouse gas emissions. TBL management is also evident among businesses in the Silicon Valley who are known for providing employees with free organic meals at their cafeterias, which can increase their health, job satisfaction, and productivity, and reduce costs associated with sick days and turnover.

In short, the TBL approach draws attention to the business case for sustainable development.

The TBL approach has arguably become the dominant management paradigm in the larger business world. For example, in 2011 100% of the UK's 100 largest companies issued annual reports on their social and ecological performance (up from 71% in 2005, and from 27% in 1996). The comparable figures were 99% in Japan, 83% in the U.S., 79% in Canada, 59% in China, and 20% in India.[44] There is ample research that suggests that it "pays to be green."[45] For example, research shows that when firms are added to the Dow Jones Sustainability Index (DJSI)—the most-respected listing of leading sustainable corporations in the field—their share values go up, suggesting that financial well-being is enhanced alongside socio-ecological well-being.[46] Companies on the DJSI list—which identifies the top performers in their industry—include Walmart, Enbridge Mining, PespiCo, Royal Dutch Shell, Nissan, and Bridgestone Corp.[47]

The TBL approach has arguably become the dominant management paradigm in the larger business world.

The influence of TBL management is also evident in a recent study involving almost 2,000 executives from 100 countries; 51% of respondents indicated their firm had "fully addressed" (13%) or "largely addressed" (38%) ecological sustainability issues, and 53% responded that their firm had "fully addressed" (11%) or "largely addressed" (41%) social sustainability issues.[48] Further evidence that there is movement away from the classic FBL management can be seen in the growing number of business schools joining organizations like the Principles for Responsible Management Education (PRME) and supporting the UN Global Compact, as well as the growing recognition of climate change and social problems associated with income inequality, and the increasing emphasis on sustainable development, especially among Millennials.[49]

Finally, in terms of what it means to be a "good" manager, when compared to the FBL approach, TBL management can be seen as more effective according to both economic rationality and consequential utilitarianism. First, just as FBL management can be seen to be effective because it enhances a firm's financial well-being, the same can be said for TBL management. Indeed, research suggests that TBL firms often financially outperform FBL firms.[50] Second, the TBL approach is also arguably more ethically effective than the FBL approach within an **enlightened consequential utilitarian** *moral-point-of-view, which suggests that ethical management seeks to improve an organization's financial well-being, especially via reducing negative social and ecological externalities*.[51] This enlightened TBL approach is similar to the FBL approach, except that the TBL approach explicitly notes that reducing negative externalities can be in one's self-interest; sustainable development and preserving socio-ecological well-being can serve the financial self-interests of the firm.

Social and Ecological Thought (SET) management

SET management *is characterized by its emphasis on enhancing social and ecological well-being while maintaining financial viability.* SET management recognizes the importance of financial viability, but it encourages managers to improve social and ecological well-being even when this does not *maximize* the financial well-being of the organization. In other words, the SET approach realizes that management involves a larger "set" or collection of factors that go beyond maximizing the financial bottom-line, and that management is "set" or embedded within larger social and ecological environments. The SET approach prepares managers to be ready and set to go face the socio-ecological issues facing humankind. SET management is also more process-oriented than either FBL or TBL; this is consistent with the Old French idea of "sette" which means "sequence" and points to processes (e.g., a musical set played by a band).[52] SET management principles are evident at *31 bits* (the opening case) and at Greyston Bakery, co-founded by Bernie Glassman, a former aeronautical engineer with a PhD in applied mathematics.

Exemplary SET manager: Bernie Glassman

In 1982 Bernie Glassman and his wife started Greyston Bakery in New York City, a company that illustrates a SET approach to the four management functions.[53] Today the bakery, located on the Hudson River, is famous for the 35,000 pounds of brownies it produces daily, made with fair-trade ingredients,[54] most of which end up in Ben & Jerry's ice cream or sold at Whole Foods.

First, in terms of *planning*, the mission of Greyston is reflected in its motto: "We don't hire people to bake brownies; we bake brownies to hire people." Greyston hires chronically underemployed people, such as ex-convicts and homeless people, using what it calls an Open Hiring process, where people apply for jobs by adding their names and contact information to a waiting list, and are offered a job when it's their turn. No resumes or references are required. In this way over the years, Greyston has created over 3,500 jobs that pay a living wage. Greyston currently employs over 150 full-time workers.[55]

Second, in terms of *organizing* its resources, all the profits from the bakery go to the Greyston Foundation, a non-profit organization that invests in the local community. Greyston has created space for community gardens, workforce development programs that provide skills training and job placement service for youth aged 18-24, a learning center for children, and environmental education programs.

Third, in terms of *leading*, Glassman's approach is based on two core principles: (1) life is intrinsically interdependent, which means that all businesses should help meet the needs of the whole community and the whole person; and (2) change is constant, which gives rise to seeing business as a path where one never arrives, a journey where managers value innovation, agility, and growth.[56] For example, new hires at Greyston enter a ten-month apprenticeship process where they learn to grow as employees and as persons. In addition to the benefits this provides to participants, Greyston estimates it saves local taxpayers over $2 million per year in recidivism costs alone.[57]

Fourth, with regard to *controlling*, in 2014 Greyston became the first company in New York to register as a Benefit Corporation, a new legal status now available in most U.S. states that enables firms to place socio-ecological well-being ahead of maximizing profits. As a B Corp, Greyston uses services provided by a non-profit organization called "B Lab" to monitor, measure and certify its financial, social and ecological performance.[58]

Just as TBL management seeks to address shortcomings associated with its FBL forerunner, so also SET management seeks to address shortcomings associated with the TBL approach. Proponents of SET management are skeptical that the TBL approach can adequately address socio-ecological problems caused by business, such as the $7 trillion

TBL businesses are unable to address the host of socio-ecological problems that cannot be solved within a profit-maximizing paradigm.

worth of negative externalities businesses annually create. While it is heartening that many of the world's largest firms are leaders in TBL practices, it is also true that the world's largest 3,000 corporations account for over US$2 trillion in negative ecological externalities each year. That is the equivalent of about 7% of their total revenues, and an amount close to their net profits.[59] Observations like these raise the question of whether TBL best practices are good enough. For example, Walmart has impressive accomplishments in the areas of renewable solar energy and reduced packaging, but it also puts pressure on suppliers to constantly reduce prices, which creates incentives to cut corners, which in turn can reduce social and ecological well-being. As well, Walmart's policies regarding minimizing employee benefits (e.g., by keeping employees at a part-time level) off-loads costs onto social agencies and taxpayers, and its sourcing of products from around the planet creates negative externalities caused by greenhouse gas emissions related to shipping (not to mention negative socio-ecological externalities in overseas manufacturing facilities).[60] A similar story can be told about Enbridge Mining, rated by DJSI as "best in class" even though it is responsible for the most expensive onshore oil spill in U.S. history.[61]

In short, because TBL management is committed to improving financial well-being, it can address only the subset of socio-ecological problems that lend themselves to enhancing the financial bottom-line. Thus, TBL businesses are unable to address the host of socio-ecological problems that cannot be solved within a profit-maximizing paradigm.

Another difference between SET management and a TBL approach is that, while both emphasize reducing *negative* socio-ecological externalities, the SET approach places relatively more emphasis on enhancing or creating *positive* socio-ecological externalities. For example, *31 bits* jewelry is made from recycled paper (which reduces negative ecological externalities) and provides jobs and education for poor single mothers in Uganda (which enhances positive social externalities). Greyston Bakery hires ex-convicts and others who have a difficult time finding jobs in the economy (which increases positive social externalities) and lowers recidivism and crime rates (which reduces negative social externalities).

With respect to effectiveness as defined by economic rationality, SET management is seen as less effective than the FBL and TBL approaches with regard to maximizing a firm's financial well-being, at least in the medium to short-term. However, if we accept the argument that the FBL and TBL approaches are not sustainable in the long term, then SET management could be seen as more economically effective than the FBL and TBL approaches in the long run.[62]

Similarly, the effectiveness of SET management in terms of ethics also differs from the FBL and TBL approaches. Recall that the FBL and TBL approaches are both based on variations of a consequential utilitarian moral-point-of-view, which focuses on outcomes (i.e., consequences) and the idea that more financial wealth is better. In contrast, SET management is based on **virtue theory,** *which focuses on how happiness is achieved by practicing virtues in community.*[63] The SET approach emphasizes virtuous process and character, not financial outcomes. Indeed, virtue theory deems it unethical to maximize economic goals for their own sake.[64] When it comes to financial well-being, virtue theory emphasizes that "enough is enough." This applies both to having enough consumer goods, as well as to creating enough financial value capture (e.g., profits), and stands in contrast to the insatiable "more money is better" assumptions that are evident in the FBL and TBL approaches. From a virtue theory perspective, the purpose of business is not to make as much money as possible, but rather to provide goods and services that benefit society.

From a virtue theory perspective, the purpose of business is not to make as much money as possible, but rather to provide goods and services that benefit society.

Virtue theory goes back to ancient Greece and philosophers like Aristotle and his peers, who argued that using money simply to make more money, and achieving luxurious amounts of financial wealth, is dysfunctional and unethical. Rather, from the perspective of virtue theory, the purpose of human activity is to optimize people's happiness, which is achieved by practicing virtue in community. For example, in terms of the four cardinal virtues, the virtue of *wisdom* is evident when managers make decisions that are deliberately aware of, and informed by, their larger socio-ecological setting; *justice* is evident when managers ensure that all stakeholders associated with a product or service receive their due and are treated fairly (being especially sensitive to the marginalized); *self-control* is evident when managers temper their own narrow self-interests; and *courage* is evident when managers are willing to address shortcomings of dominant socio-economic structures and systems.[65]

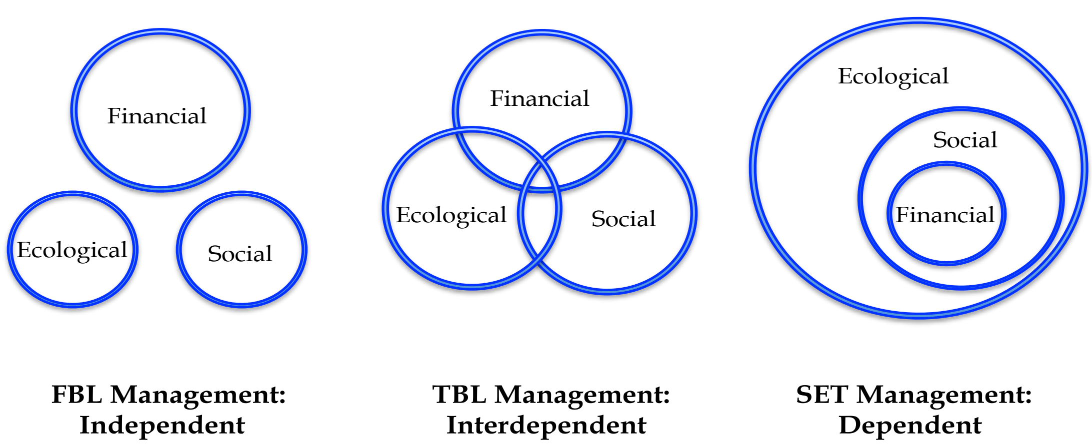
The SET management emphasis on community is also consistent with the time-honored moral-points-of-view associated with the indigenous peoples of the planet, such as North American Cree and Ojibway, Australian Aboriginals, and the African Ubuntu philosophy whose heritage stretches back thousands of years to the Egyptian idea of *Maat* (which was associated with the Hebrew idea of *shalom* or wholeness). Like other indigenous moral philosophies,[66] Ubuntu has a lot to do with interconnectedness, in particular with humankind's inter-connectedness with others and with nature. Whereas from a traditional western perspective people see themselves primarily as individuals and secondarily try to also understand themselves as members of a larger community and cosmos, from an Ubuntu perspective we are primarily members of a larger cosmos and community who secondarily see ourselves as individuals: "I am, because we are; and since we are, therefore I am."[67]

In sum, principles associated with SET management have been evident for a long time in the history of humankind, and the influence of SET management can be expected to grow in the near future, especially as people become more aware of the shortcomings and critiques of both FBL and TBL management.

Depicting differences between FBL, TBL and SET approaches

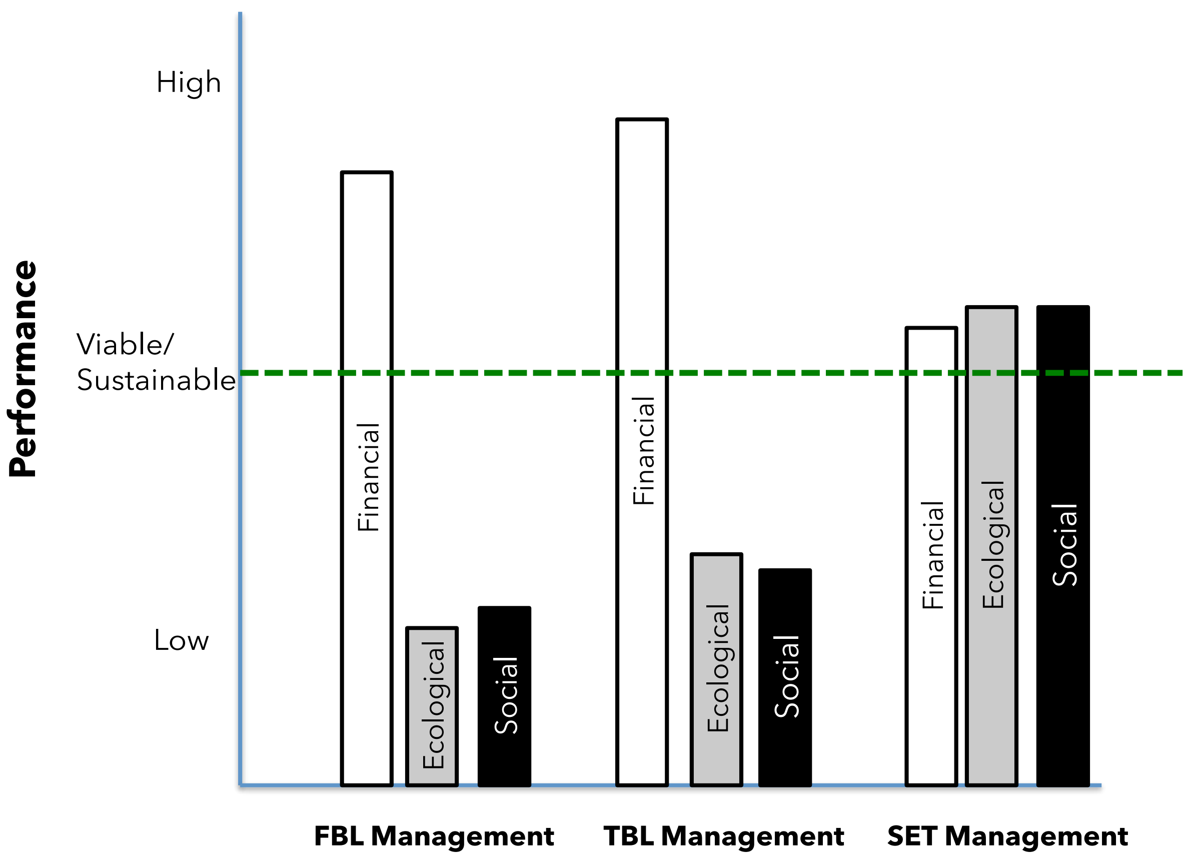
This book will examine in detail the differences between the three approaches to management, but for now we will offer two simple ways the differences can be depicted in terms of how each approach understands the relationships between financial, social, and ecological well-being. First, as shown in the Venn diagram in Figure 1.1,[68] the FBL approach tends to assume that management is primarily concerned with economic activity, which is separate and independent from the natural and social environments. The FBL approach assumes that government and other societal institutions will manage social and ecological well-being. Second, TBL management suggests that economic activity is interdependent with the natural and social environments. TBL managers therefore seek to simultaneously enhance financial, ecological, and social well-being. However, TBL managers are constrained by needing to make a business case for which socio-ecological issues they can address. Finally, SET management suggests that economic activity is embedded within and dependent upon social and ecological well-being. Specifically, economic activities are a human invention and thus a subset of society, and society is in turn a subset of the natural environment. For example, just as the planet existed for billions of years before humankind came on the scene, so also humankind existed for thousands of years before money came on the scene.

Figure 1.1: Three ways to depict the relationship between the financial and the ecological and social realms



The bar chart in Table 1.2 provides a simplified depiction of the performance level for each management approach in terms of overall financial, ecological, and social well-being. For FBL management, financial well-being is high, but social and ecological well-being are unsustainably low. For TBL management, financial performance is even higher, and social and ecological well-being have improved thanks to the reduction of negative socio-ecological externalities, though they are still unsustainably low. Finally, for SET management, financial well-being is viable but lower than for the FBL and TBL approaches. However, social and ecological well-being have increased and become sustainable as negative externalities have been reduced and the emphasis on positive externalities has increased. The values on the bar chart are intended to be suggestive and represent what might be average relative performance within each approach; there will be exceptions to these representations.

Table 1.2: The financial, social, and ecological performance associated with each of the three management approaches



BENEFITS OF LEARNING 3 MANAGEMENT APPROACHES

Each of the three approaches to management discussed in this book is what Max Weber calls an "ideal-type." This does *not* mean that they are the ideal or best way of managing. Rather, an **ideal-type of management** *refers to a specified constellation of concepts and theory that collectively identifies what effective management means and how it is practiced.* Just like other ideal-types that you may be familiar with—for example, introverts versus extroverts—we would not expect to find many managers who are a perfect example of an FBL, TBL, or SET approach. This means that, even though this book will provide many examples of managers who illustrate FBL, TBL, or SET management, those same managers could sometimes be used to illustrate one of the other two approaches. For example, Jack Welch was a classic FBL manager, and Jeff Immelt exemplifies TBL management, but sometimes even they might act in ways not intended to maximize GE's profits.

Research points to several benefits that come from learning more than one approach to management, that is, from learning about different ideal-types of management. First, doing so increases students' critical thinking skills.[69] This is an important point, since research suggests that the critical thinking skills of university students often do not improve even after four years of study, and that business students' critical thinking skills sometimes lag behind those of students in other disciplines.[70] Learning multiple approaches to management helps students to develop their abilities to resist simple answers by exploring and integrating opposing ideas or viewpoints, which are hallmarks of outstanding managers.[71] Learning multiple approaches is akin to the difference between management *training* (learning what managers do) and management *education* (understanding why managers do what they do so that students can adapt appropriately for the conditions they will face in the future).[72] Learning more than one approach is also relevant because managers will likely need to interact with different types of managers as they work in different contexts and with different people.

Learning multiple approaches to management increases your critical thinking skills.

Second, research suggests that learning about multiple approaches also improves skills in ethical thinking, and serves as an ongoing reminder that managers' actions and practices are not value-neutral.[73] In fact, it is impossible to develop management theory that is *not* based on some values. For example, each of the three approaches to management discussed in this book are value-laden (i.e., each is based on its own distinct moral-point-of-view). Studying only one approach often acts as a self-fulfilling prophecy, where students forget that the approach is based on specific values and thus they increasingly adopt those values.[74] Business schools that teach only FBL management have been criticized because their students have become more materialistic and individualistic during their program of study. In contrast, learning multiple approaches compels and enables you to give careful thought regarding your own personal moral-point-of-view, and how you express it in the workplace. You may feel drawn to any one of the three types described here, or you may find yourself using the tools provided in this book to develop your own distinct approach to management, based on your own values and understanding of managerial effectiveness.

Finally, studying the three different approaches to management can be likened to studying three managerial languages.[75] It is important for managers to become familiar with multiple languages, because they will be managing a variety of people in a variety of settings during their careers. Students who are multilingual tend to have higher levels of cultural empathy, open-mindedness, tolerance of ambiguity and creativity,[76] a deeper understanding of their mother tongue, and enhanced ability to learn and understand additional languages.[77] Research suggests that business students tend to move away from conventional FBL management the more they learn about alternative approaches like TBL and SET management.[78]

ENTREPRENEURIAL MANAGEMENT

Each chapter in this book ends with a discussion about the implications of the chapter material for entrepreneurship. Entrepreneurs and the organizations they create are vitally important to business and to the world. An **entrepreneur** is *someone who conceives of new or improved goods or services and exhibits the initiative to develop that idea by making plans and mobilizing the necessary resources to convert the idea into reality*. Entrepreneurs change existing organizations and create entirely new ones, potentially fostering whole new industries and ways of doing things. Most of the breakthroughs and conveniences that shape our lives came to use through entrepreneurs, and many of the solutions we need for current problems facing the world are likely to also come from entrepreneurs. As a result, it is heartening to know that interest in starting new organizations is very high among young adults, with one U.S. study suggesting that 63% of people in their twenties want to start a business.[79]

One study found that 63% of people in their twenties want to start a business.

THREE REASONS WHY PEOPLE BECOME ENTREPRENEURS

The recipe for entrepreneurial success has two main ingredients: 1) an opportunity for a new product or service to create value for society, and 2) an organizational plan that identifies and facilitates assembling the necessary resources to pursue the opportunity. The first part of this book (especially Chapters 3, 4 and 5) will help you to explore and develop the first ingredient; the rest of the book will help with the second ingredient.

In addition to these two ingredients, entrepreneurship requires a third factor: a motivated entrepreneur who acts like a chef in choosing and assembling the ingredients.

Just as a chef can make an almost infinite variety of food dishes, so also entrepreneurs can create an almost infinite variety of new organizational start-ups. And just as a chef is informed by his/her taste and the purpose and style of the meal (is it lunch, dessert, fusion?), so also entrepreneurs are influenced by their experiences and motivations.

A recent study looked at 1,000 entrepreneurs from four English-speaking countries over a six-year period (2008–2013). It was based on the Global Entrepreneurship Monitor (GEM) research project, which provides the best international data set available for studying entrepreneurship. The study found that the three main reasons that motivate entrepreneurs to start a new business are relevant to our discussion of the FBL, TBL and SET approaches to management.[80]

First, according to the entrepreneurs in this study, perhaps unexpectedly, financial gain is only the third most important reason for starting a new business. Although many people might assume that the main reason entrepreneurs go into business is to make money, the data suggest that this simply is not true. When entrepreneurs were asked to list all of the reasons they could think of for starting their business, less than half (42%) even mentioned needing or wanting more income, and only 25% indicated that having great wealth or very high income was important to them.[81] These results are consistent with other research findings that show that, when asked to identify their *primary* motivation for starting a business, only 8% of entrepreneurs mention money.[82] So, even though most management and entrepreneurship research and writing may still assume an FBL approach,[83] most entrepreneurs do not even mention financial well-being as a reason for starting a business.[84]

Most entrepreneurs do not start a business in order to make money: rather, they want work they find more satisfying and they want to make the world a better place.

So, if not money, what is important? The most important reason entrepreneurs identify for starting their business is related to their desire for autonomy and better work (which are central components of personal social well-being, related to TBL management). For example, 73% of entrepreneurs rated "To have considerable freedom to adapt my *own approach to work*" as important.[85] This desire for autonomy and to be one's own boss is also identified as a main reason in other studies of entrepreneurs,[86] and is clearly of considerable relevance for a book on management. In order to be your own boss and to effectively manage a business in a way that is consistent with your "own approach to work," it is helpful to learn about different approaches to management.[87]

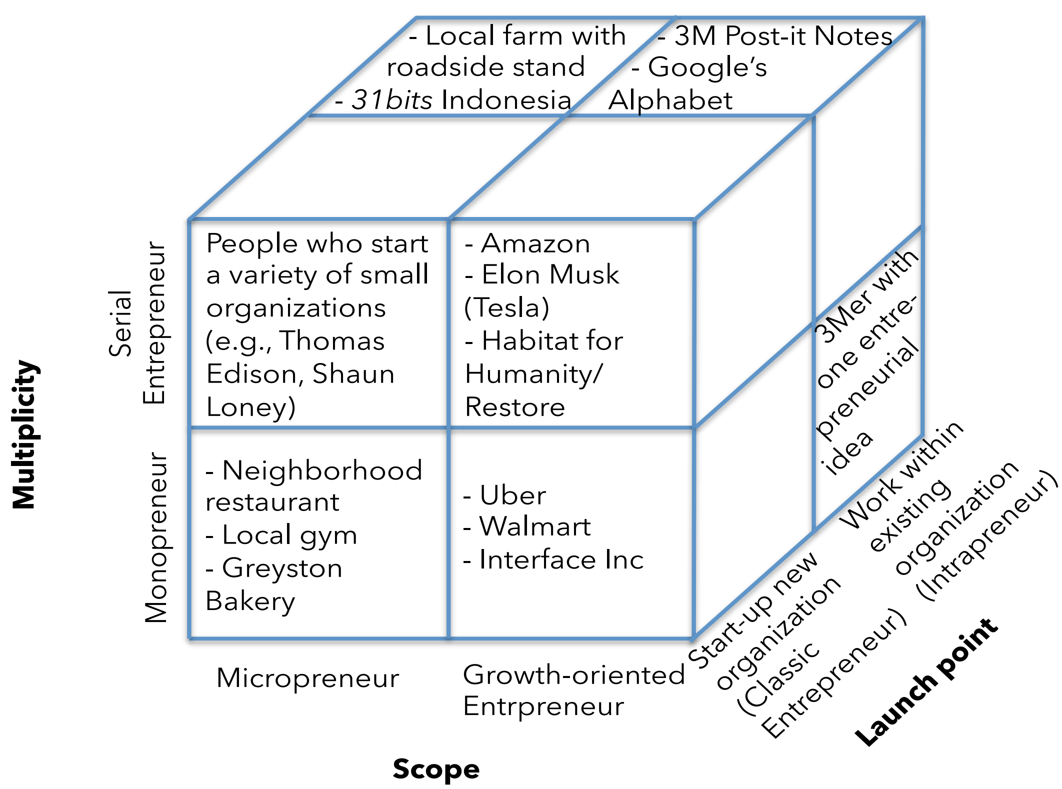
The second-most important reason entrepreneurs identify for starting their new business is to address challenges and pursue opportunities that are related to a SET approach. For example, 40% of entrepreneurs mentioned the desire "To make a positive difference to my community, to others, or to the environment."[88] Start-ups created by entrepreneurs with this motivation, and/or the motivation for autonomy and good work, have higher survival rates than financially-motivated firms.

Finally, note that the reasons given above are the three main motivations for entrepreneurs who started traditional businesses. The study does not include founders of non-profit organizations or other **social enterprises**, *which are entrepreneurial organizations created intentionally and specifically to pursue a social or environmental well-being mission*. Thus, if such SET-oriented entrepreneurs had been included, we might expect financial well-being to be even less important, and enhancing socio-ecological well-being to be more important.

TYPES OF ENTREPRENEURS

In addition to understanding the three main motivations of entrepreneurs, the literature also points to three important characteristics that are helpful for distinguishing between different types of entrepreneurs: 1) the scope of their ambition; 2) their propensity to start multiple new organizations; 3) and their desire to work within existing organizations (see Figure 1.2). Each of these three characteristics is discussed below to identify different types of entrepreneurs, and to explain how each type is evident in the three management approaches (FBL, TBL and SET management).

Figure 1.2: Different types of entrepreneurship



Scope

Some entrepreneurs, called **growth-oriented entrepreneurs**, *are distinguished by a strong and clear intention to grow a new organization into a large and influential force in their industry*. Examples of successful growth-oriented entrepreneurial organizations include Amazon, Facebook, Uber, Tesla, Google, and Habitat for Humanity. These and other similar organizations started in the minds of one or a few people and grew to become global giants. Because growth-oriented entrepreneurs create and capture so much value, they attract media attention and tend to be what many people imagine when thinking about entrepreneurship.

However, entrepreneurs with less ambitious goals are more common.[89] **Micropreneurs** *seek to develop successful and viable organizations, but not large ones; they do not include size in their definition of success*. Many micropreneurs start their organizations for personal satisfaction or lifestyle reasons, rather than to dominate an industry. Micropreneurial organizations include local "mom & pop" stores, craft-oriented businesses such as micro-breweries, and the many small manufacturing operations that are supporting families in low-income economies. One common approach to becoming a micropreneur is to purchase a franchise. **Franchising** *involves a franchisor selling a franchisee a complete package to set up an organization, including such things as using its trademark and trade name, its products and services, its ingredients, its technology and machinery, as well as its management and standard operating systems*. Many well-known multiple outlet businesses are franchises, including McDonald's, 7-11, UPS, Lululemon, Freshii and Ten Thousand Villages.

In this discussion, scope or ambition refers to how large the entrepreneur intends for the new organization to grow; it does not refer to which of the three management approaches is used. In fact, entrepreneurs of any scope or ambition level may adopt an FBL, TBL, or SET approach. Because many of the highest profile growth-oriented entrepreneurs appear to be primarily driven by financial profit,[90] one might assume that the FBL approach is most compatible with this style of entrepreneurship. However, that is not necessarily the case. For example, Nina Smith founded the organization GoodWeave in 1994 with the goal of eliminating all child labor in the global carpet industry. By early 2016 she had changed the practices of 140 global brands and reduced child labor in the industry by 80%.[91] Similarly, Vivek Maru and Sonkita Conteh founded Namati, which is a global organization working with communities to protect their legal rights in land, healthcare, and citizenship. Namati has helped tens of thousands of clients in numerous countries.[92] While these and other SET organizations like them are clearly not pursuing maximum financial profit, they are certainly examples of growth-oriented entrepreneurship both in terms of their ambitious goals and the extent of their influence.

Likewise, because of their focus on small organizations, one might assume that micropreneurs are most concerned with TBL or SET approaches. It is true that many micropreneurs leave traditional jobs in FBL firms and start their own business as a way to serve social and ecological ends.[93] However, it is also true that some micropreneurs are primarily concerned with making money, rather than with TBL or SET outcomes.

Multiplicity

Another characteristic that helps to differentiate among entrepreneurs is their propensity to start multiple organizations. Many entrepreneurs are **monopreneurs** *who start a viable organization in order to manage it for the rest of their career* (e.g., Sam Walton). Other entrepreneurs, however, find more satisfaction in starting new organizations than in managing them indefinitely. **Serial entrepreneurs** *start many organizations*. Serial entrepreneurs are typically excited by new ideas and thrive when facing the challenge of creating a new organization. Entrepreneurs of this sort often prefer the energy and uncertainty of a start-up, and frequently leave managing the organization to others once it is successfully underway (see Chapter 19).

Serial entrepreneurs prefer the energy and uncertainty of a start-up, and frequently leave managing the organization to others once it is established.

Both monopreneurs and serial entrepreneurs may adopt any of the three managerial approaches. For example, Thomas Edison founded more than 100 FBL businesses in a variety of industries, including automobiles, batteries, cement, mining, and farming.[94] Elon Musk has created TBL ventures in automotive, software, financial services, space travel, artificial intelligence, and drilling organizations. And Shaun Loney has helped to launch a series of SET enterprises that enhance social and ecological well-being (see chapter 9).

Launch point

The final characteristic that distinguishes entrepreneurs is whether they create a new organization or work within an existing one. When we think of entrepreneurs, we usually think of the **classic entrepreneur**, *who starts an entirely new organization to pursue a new product or service idea*. However, many new ideas, products, and services are launched inside existing organizations. Such ventures are started by **intrapreneurs,** *persons who exhibit entrepreneurship within an existing organization*. Unlike a classic entrepreneur, an intrapreneur does not create a new organization, but works within one that is already operating. Many new products or services created by organizations, as well as spin-off and subsidiary firms, are the result of intrapreneurship. Some organizations even go as far as making intrapreneurship a formal part of all of their operations. For example, Google allows employees to devote as much as 20% of their work time to projects of their own choosing, and 3M has a framework of internal systems, centers, and funding for developing employees' new ideas. Much of what an intrapreneur does is similar to what any other entrepreneur does, but there are also some important differences, and these are discussed in Chapter 14.

All types of entrepreneurs must address all four functions of management. They must plan how to implement their idea, organize the resources to do so, lead their organization as it begins to operate, and control operations to achieve their ultimate goal. As a result, entrepreneurship offers an excellent lens for taking a closer look at every aspect of management. To help readers understand and apply the ideas in this book, each chapter ends with a discussion that connects the ideas in that chapter to the choices and challenges faced by entrepreneurs.

Conclusion and Overview of the Book

In this book, we start by describing the big issues in management and the various forms of well-being that are relevant to management and organizations. We then turn to a more detailed analysis that focuses on how to set organizational goals and plans, how to organize and manage the resources needed for the operation of an organization, how leaders can help organizational members to be motivated and strive for high performance, and how to design control systems that support the effective functioning of the organization.

Each chapter in this book concludes with a section that highlights the entrepreneurial implications of the various theories and ideas that are presented in that chapter. An ongoing feature is the idea of developing an **Entrepreneurial Start-Up Plan (ESUP),** *which identifies an entrepreneurial opportunity and describes a detailed management plan for acting on that opportunity*. Questions and guidance for applying the chapter ideas when developing an ESUP are also provided. All of this information will help readers better understand management, organizations, and the entrepreneurial process that is so vital to society.

Understanding our history is important for managing in the present and in the future, if only because by seeing what once was we may be freed and inspired to think more boldly about what could be.

The chapter content of the book unfolds as follows. Chapter 2 briefly describes the history of how humankind has organized the production of goods and services; a more detailed description of the specific management principles that have been developed over the past century is emphasized. Understanding our history is important for managing in the present and in the future, if only because by seeing what once was we may be freed and inspired to think more boldly about what could be.

Chapters 3, 4 and 5 focus on three domains of effectiveness—financial, social, and ecological well-being—and how management facilitates these. Because these chapters identify the central challenges and needs that are facing humankind in the coming decades, they will be of particular interest to entrepreneurs and readers in the early stages of their management careers. These chapters identify many possible opportunities that an ESUP may address.

Chapter 6 provides an overview of entrepreneurship (including small business and family enterprises) and describes the four steps in the entrepreneurial process. This material will provide a framework to develop an ESUP, which will facilitate developing entrepreneurial opportunities that arise from reading Chapters 3 to 5. The rest of the book will then help to refine the project chosen for the ESUP by explaining the following:

Planning: the decision-making process, goals and plans, mission and vision, and strategy associated with the proposed new venture (based on concepts and theory presented in Chapters 7, 8, 9, and 10);

Organizing: the organizational structure, design, human resource management systems, and approach to managing change (based on concepts and theory presented in Chapters 11, 12, 13, and 14);

Leading: ensuring that members are motivated, managing groups and teams, and intra-organizational communication (based on concepts and theory presented in Chapters 15, 16, 17, and 18); and

Controlling: the systems that will enable members to monitor activities and achieve planned goals (Chapter 19).

CHAPTER SUMMARY

1. The study of management is important for five reasons:

i) It develops conceptual skills that increase your likelihood of being promoted into a managerial position.

ii) It enhances your working relationships with your own managers.

iii) It allows you to better understand how managers operate in different organizations and settings.

iv) It improves your ability to create value for society, and to capture value for organizations.

v) It helps you to develop a richer understanding of who you are and of your life ambitions.

2. The definition of management has two parts:

i) The four management functions:

• **Planning** means deciding on an organization's goals and strategies and identifying the appropriate organizational resources that are required to achieve them (facilitated by entrepreneur, negotiator, and disseminator roles).

• **Organizing** means ensuring that tasks have been assigned and a structure of organizational relationships created that facilitates the meeting of organizational goals (facilitated by resource allocator and liaison roles).

• **Leading** means relating with others in the organizational unit so that their work efforts help to achieve organizational goals (facilitated by leader, spokesperson roles, and figurehead roles).

• **Controlling** means ensuring that the actions of organizational members are consistent the organization's underpinning values and standards (facilitated by monitor and crisis handler roles).

ii) The criteria used to describe effective management:

• For **FBL management**, effectiveness is evident when managers maximize the financial well-being of their organizations. It is based on assumptions about the invisible hand idea, and is consistent with a consequentialist utilitarian moral-point-of-view.

• For **TBL management**, effectiveness is evident when managers enhance an organization's financial well-being while simultaneously reducing its negative socio-ecological externalities. It is based on ideas about sustainable development, and is consistent with an enlightened consequentialist utilitarian moral-point-of-view.

• For **SET management**, effectiveness is evident when managers enhance socio-ecological well-being while maintaining financial viability. It is based on recognizing the finite resources of the planet, and is consistent with virtue theory and Indigenous moral philosophies.

3. Studying FBL, TBL, and SET approaches to management enhances:

• Critical thinking (education vs training; preparation for future conditions)

• Ethical thinking (all management is value-laden)

• Cultural empathy, open-mindedness, tolerance, and creativity

4. Entrepreneurs start businesses in order to:

• Gain autonomy and freedom

• Meet challenges and opportunities

• Achieve financial goals

5. Different types of entrepreneurs have been identified based on their scope (micropreneurs vs growth-oriented), multiplicity (monopreneurs vs serial entrepreneurs), and launch point (classic entrepreneurs vs intrapreneurs).

Questions for Reflection and Discussion

1. Many people are attracted to the status, power, and financial rewards associated with being a manager. However, the lifestyle of managers can be stressful, with a high workload and an unrelenting sense of obligation and responsibility to the people being managed. For example, one U.S. study showed that senior managers work long hours and enjoy an average of only 12.2 vacation days per year.[95] What do you think are some of the pros and cons of becoming a manager? Is this a profession and a lifestyle that appeals to you? Why are you studying management?

2. Which metaphor of management do you like better: the idea that managers perform four functions in an orderly manner, or that managers play ten roles alongside other organizational actors? Can you think of additional metaphors that might be useful for understanding management?

3. Does financial success increase happiness? Some research suggests that the answer is "yes" for people who are living in poverty, but "no" for people who are already earning more than $75,000 per year.[96] Other research suggests that money and materialism are, in fact, associated with a *decline* in life satisfaction and personal well-being.[97] Think of a person you know who is truly happy and content. What would that person say about the relationship between overall well-being and an FBL worldview? Do you think that money can buy happiness? Explain your reasoning.

4. When someone is described as an "effective" or "successful" manager, do you assume that the manager is *financially* successful (FBL management), or do you assume they have been able make money while at the same time responsibly attending to social and ecological externalities (TBL)? Or do you assume they have actually enhanced socio-ecological well-being (SET)? What criteria of success would you like to see used by the manager you report to? By which criteria would you like to be judged?

5. Recall a current or past manager you have worked for. How would you describe that person in terms of FBL, TBL, and SET approaches? What factors did you consider?

6. Why study three different approaches to management? Why not simply find the "best" or most popular approach and then learn about it?

7. Do you think that TBL management is able to adequately address the socio-ecological crises that are facing humankind? If not, why do you think the popularity of TBL management has been increasing so rapidly? Do you think SET management is needed? What are factors that might impede or promote the acceptance of SET management?

8. How likely (in percent) do you think it is that you will start a new organization in your career? What would be your main reasons for starting an organization? Look at Figure 1.2, and identify what type of entrepreneur most reflects who you are. Which of the three approaches to management would you like to emphasize in a start-up?

PREVIEW AND SUMMARY OF CHAPTER 3

	FBL	TBL	SET
Capitalism: rewarding entrepreneurs for combining resources in ways that create valued goods and services	**Documentational capitalism:** emphasis on detailed written contracts, public financial reports, management rights, short-term maximization of financial performance	**Relational hybrid:** emphasis on relational contracts, long-term reputation and maximization of firm financial performance, costs of neglecting employee rights, needs of key stakeholders	**Relational capitalism:** emphasis on relational contracts, long-term reputation and financial firm performance, employee rights, the needs of all stakeholder groups
Economics: how goods & services are produced, distributed, and consumed	**Acquisitive economics**: managing property and wealth to maximize the (especially) short-term monetary value for owners	**Hybrid:** managing property and wealth to maximize monetary value for owners while reducing negative socio-ecological externalities for key stakeholders	**Sustenance economics:** managing property and wealth to increase the long-term overall well-being for owners, members, and other stakeholders
Performance in:			
a) High-income countries			
1. Jobs	Increase job creation	Good jobs, reduce turnover	Broad opportunities, more leisure time
2. Goods and services	Increase net productivity	Productivity via less externalities	More with less; reduce consumption
3. Profits	Increase profits	Increase profits	Enough profits; GPI
b) Global perspective			
1. Jobs	Jobs for the poor	Good jobs for poor	Local job ownership, pay living wage
2. Goods and services	Free trade/Gross World Product	Empower those at "Base of Pyramid"	Fair trade
3. Profits	Free flow of money helps all; IMF	Help poor via funds from World Bank	Conventional money flow widens inequality
Entrepreneurship implications	Maximize profits (even if it raises socio-ecological costs)	Maximize profits (via lowering socio-ecological costs)	Achieve financial viability and socio-ecological well-being

CHAPTER 3:
MANAGEMENT AND FINANCIAL WELL-BEING: JOBS, GOODS & SERVICES, AND PROFITS

Learning goals

After reading this chapter, you should be able to:

1. Understand the different varieties of capitalism and economics.

2. Identify key turning points in the economic history of humankind.

3. Summarize the approach to jobs, goods and services, and profits that the FBL, TBL and SET perspectives take in high-income countries.

4. Summarize the approach to jobs, goods and services, and profits that the FBL, TBL and SET perspectives take from a global perspective.

5. Describe the potential problems and opportunities that entrepreneurs encounter when they try to enhance financial well-being in terms of jobs, goods & services, and profit.

THE PRICE IS RIGHT[1]

It seems that Dan Price, a classic entrepreneur who has become a crusader fighting against income inequality, has always had a soft spot for the underdog, perhaps because he himself grew up in a family that struggled financially. When he was a teenager, Price played bass guitar in a three-person rock band that received national airplay and went on tour. While on tour he heard how bar and coffee shop owners were paying exorbitant prices and receiving spotty services from the large financial firms that processed their credit cards.

When he was 16 years old the band broke up and he started to help these small retailers—such as his friend Heather who managed Moxie Java, a coffee shop in the city of Caldwell, Idaho—get access to more affordable credit card services. By the time he entered university, he had about 200 clients and was processing credit card transactions using outsourced technology, and netting over $10,000 in a good month.

In 2004, at age twenty, Dan and his older brother Lucas co-founded Gravity Payments, a company with about 130 employees in the state of Washington. The company began to build its own technology, and developed systems to process card payments in-house.

By 2008 he had graduated from university and won a number of business awards. And then the recession of 2008 hit, which nearly wiped out the company. Some of his clients went bankrupt, and revenues dropped by 20%. "We almost lost everything." At the time, Gravity Payments could not offer employees high salaries, but Dan promised them an exciting place to work and an opportunity to learn a lot, which would pave the way for their future financial success (whether at Gravity or elsewhere).

In 2011 Price noticed that an employee, Jason Haley, seemed to be in a sour mood. When Price asked Haley what was on his mind, Haley said, "You're ripping me off." Haley agreed that his pay, about $35,000 a year, was consistent with market rates: "but that just translates into me not making enough money to lead a decent life." Price was shocked and hurt, but eventually he came to the conclusion that Haley had a point.

In 2012 Price gave everyone a 20% pay raise, and then watched as productivity jumped by over 30%. So he gave another 20% pay increase in 2013, and profits rose by a similar amount. So he did it again in 2014, and profits rose again (but not as much as before). That year Gravity had profits of $2.2 million on revenues of $150 million, which were growing at 15% annually.

In March of 2014 Price was talking with a friend from a different firm who was describing the challenges of making ends meet on her salary of $50,000 a year. It bothered Price that, while he was earning about $1 million per year, other people "who are every bit as good and valuable as I am" were worried about a $200 rent increase. Price recalled a study by Nobel Prize winning economists Daniel Kahneman and Angus Deato who found that additional pay did not increase the happiness of people earning more than $75,000 a year, but it did for people who earned less than $75,000.[2]

So on April 13, 2014 he announced to his staff his bold decision to raise the minimum pay at Gravity Payments to $70,000 per year. This affected 70 of Price's employees, and the increase would be phased in over a three year period at a cost of about $1.8 million. Reporters from the *New York Times* and *NBC News* had been invited to cover the event, so the announcement made a big splash in social media, with over 500 million interactions. The NBC News video of the event was the most-watched in network history.

Within a year profits had doubled, revenue was growing at twice the previous rate, turnover was at a record low, and employees were happier. But for Price, the $70,000 minimum wage is not a business strategy, it is a moral imperative. In his speech at the United Nations in April 2016 he noted the importance of high income earners asking themselves: "When is enough enough?"

"I asked myself, 'What's the one thing that I care about enough to give up that whole chase of money driving me for the rest of my life?' For me, we are at the very beginning of a shift. We are at the very beginning of a movement where we realize that commerce and economics and business is not just about money. It's about helping each other. It's about solving the problems of humanity, and it's about being a good steward of the resources that we have here on this Earth."[3]

Not so long ago, the term market *referred to a place in the center of a village where people met with and bought and sold goods and services from their neighbors.*

Managers are expected to enhance economic well-being. Of course, there are many different ways to measure exactly what economic well-being means, but these measures usually involve the creation of goods and services, jobs, and financial value (especially profits). In this chapter, we examine these three basic standards of economic performance from the Financial Bottom Line (FBL), Triple Bottom Line (TBL), and Social and Ecological Thought (SET) perspectives.

As we do so, it will become apparent that the larger economic structures and systems that managers work within have been socially-constructed.[4] For example, the meaning of the term "market" has changed over time. Not so long ago it referred to a place in the center of a village where people met with and bought and sold goods and services from their neighbors. Today, the term **market** *refers to the impersonal laws of supply and demand that dictate what firms can and cannot do*. Of course, because they are socially-constructed, these "laws" can be and have been revised throughout the history of humankind (see Chapter 2).

In this chapter, we begin by describing several varieties of capitalism and economics, and provide a brief history of economic activity. Learning about different types of capitalism, like learning about different approaches to management, can improve critical thinking and one's awareness of possibilities. The current state of economics, capitalism, and organizational practices reflects historical choices, not inevitable laws. Things could have been different, and they can be different in the future. Following the discussion of capitalism and economics, we describe the FBL, TBL, and SET approaches to the creation and management of jobs, goods and services, and profits in high-income countries, as well as from a global perspective. The chapter concludes by considering the implications of our discussion for entrepreneurship.

VARIETIES OF CAPITALISM AND ECONOMICS

The economic context in which managers operate is the **political-legal environment,** *which includes both the prevailing philosophy and objectives of the various levels of government, as well as their ongoing laws and regulations*. It includes legislation about things like workplace health and safety, consumer protection, pollution, international trade, anti-trust laws, tax rates, minimum wage rates, and many other issues. One chapter is not sufficient to discuss these issues in depth, but we want to briefly introduce two typologies that provide helpful language to discuss these issues. In particular, we describe two approaches to capitalism (documentational and relational) and two approaches to economics (acquisitive and sustenance). These approaches are influenced by the different types of political systems that permit and regulate economic activity.

DOCUMENTATIONAL VERSUS RELATIONAL CAPITALISM

Capitalism *is distinct from other economic systems because of its emphasis on rewarding entrepreneurs for profitably combining resources in ways that create valued goods and services*.[5] Capitalism has been praised as one of the key innovations in the history of humankind, and it has facilitated the creation of unprecedented financial wealth. The basic idea of capitalism influences all of the world's economies. It is therefore helpful for managers to have a basic understanding of the different varieties of capitalism, and what influence the type of capitalism might have on the approach to management found in organizations.

For the purposes of this book, it is helpful to note that there are two prominent variations on the basic idea of capitalism.[6] **Documentational capitalism**—which is prevalent in English-speaking countries like the United States, Canada, the UK and Australia—*is characterized by its emphasis on: detailed contracts, public financial reports, management independence and rights, stringent anti-trust legislation, rewarding a labor force that is mobile and has transferable skills, short-term maximization of financial performance, and the use of stock options to motivate managers*. In contrast, **relational capitalism**–which tends to exist in countries like Japan, Germany, France, Finland, and Italy—*is characterized by its emphasis on: relational contracts, the long-term reputation and financial performance of organizations, employee rights, satisfying the needs of many different stakeholder groups, and investment in developing the skills of employees.*

Some of the key differences between these two types are summarized in Table 3.1. In very general terms, documentational capitalism is more consistent with FBL management, while relational capitalism is more conducive to TBL and SET approaches (where the emphasis is on building trust and relationships among stakeholders, rather than on developing comprehensive contracts).[7] Managers in documentational capitalism tend to have more freedom to make top-down decisions and to act quickly, and there are more generous financial rewards for managers who are able to maximize their organization's profits. Managers in relational capitalism generally look at the longer term. There is more continuity of memberships within organizations (less job-hopping from one organization to another), and there is greater emphasis on developing strong interpersonal relationships with managers in other organizations instead of developing formal contracts. The increased importance of relationships creates an incentive to pay more attention to the needs of all stakeholders, which increases the attention paid to socio-ecological issues.

Table 3.1: Some differences between documentational and relational capitalism[8]

Measure	Documentational capitalism *(Liberal Market Economies)*	Relational capitalism *(Coordinated Market Economies)*
Employment	Greater job mobility (from one organization to another)	Lower unemployment
Innovation	More radical innovations	More incremental fine-tuning
Income equality	Greater chance to get very rich	Greater income equality
Employee protection	Greater freedom for managers to hire and fire employees	Greater employee protection

ACQUISITIVE VS SUSTENANCE ECONOMICS

Economics *refers to understanding how goods and services are produced, distributed, and consumed*. There are two basic varieties of economics. An FBL understanding of economics points to the importance of the financial marketplace, to the so-called laws of supply and demand, and to the creation of financial wealth. This is similar to an idea that Aristotle developed over 2,000 years ago called **acquisitive economics**, *which refers to the management of property and wealth in such a way that the short-term monetary value for owners is maximized*.[9] Modern economic theory has refined this basic notion. For example, today the main economic theories that underpin FBL management explicitly add the assumption that, not only are all economic entities (individuals and organizations) seeking to improve their financial well-being, but that they are so strongly motivated to do so that they act in a self-interested fashion. They are therefore prone to lie, steal, cheat, and give out bad information in a calculated effort to mislead or confuse partners in an exchange.[10]

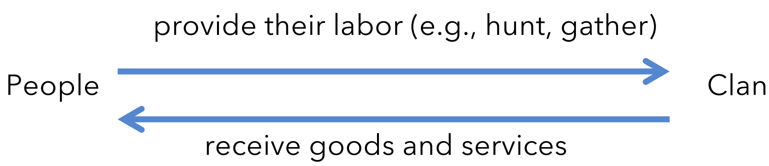
The TBL and SET approaches have a different view of economics. The TBL view, which combines elements of FBL and SET approaches, is called **hybrid economics** *which refers to managing property and wealth to maximize monetary value for owners while simultaneously reducing negative socio-ecological externalities for key stakeholders*. The SET approach can be traced back to Aristotle's second variety, that of **sustenance economics,** *which refers to managing property and wealth to increase the long-term overall well-being for owners, members, and other stakeholders*. Sustenance economics emphasizes community-oriented values, long-term and multi-generational concerns, and issues related to social and ecological stewardship. It speaks to issues of quality of life that cannot be meaningfully expressed or reduced to quantifiable measures like financial wealth, income, or goods consumed.[11] Both TBL and SET perspectives agree that dysfunctions occur when managers are solely driven to maximize financial profit, when finances are seen to be the only or the most important focus, and when concerns for the wealth of shareholders trump the concerns of all other stakeholders.

Before we examine how managers enhance economic well-being via jobs, goods and services, and profits, it is helpful to consider a brief historical overview of how these three elements came to be important and how they fit together.

SIMPLIFIED MODELS OF THE ECONOMY

Humankind has always worked in groups in order to create the goods and services that people require to survive and thrive. Before money was invented, the economic model looked like Figure 3.1. People contributed to their clan by performing tasks (e.g., hunting, gathering, childcare), and then everyone in the clan shared the resulting benefits (e.g., everyone had food, social contacts, and security). The clan was both the producing and the consuming group with all members actively participating in both aspects, so that producing goods and services was a part of clan membership. Everyone had a personal connection to the goods and services produced in the clan.

Figure 3.1: Simple economy (40,000 BCE)

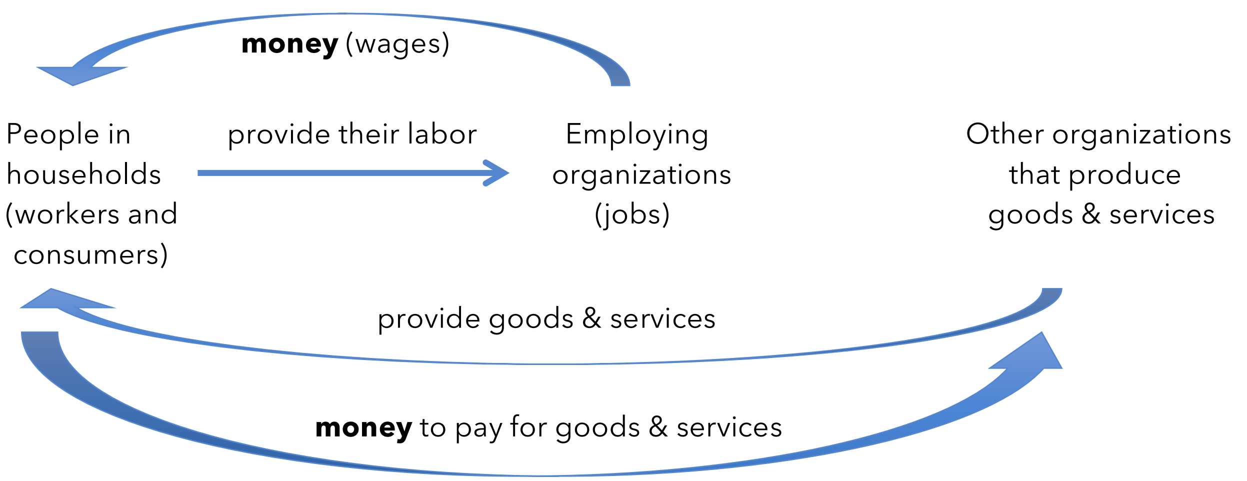


In terms of jobs, estimates suggest that on average people worked about 24 hours a week on hunting and gathering, and about 19 hours on child care, cooking, and so on. In terms of goods and services, people only had the (fresh) food that was in season, there were no modern healthcare services, and life was harsh. Because the idea of money had not yet been invented, there were no profits per se.

In hunting and gathering societies, people work about 24 hours a week on hunting and gathering, plus 19 hours on food preparation and child care.

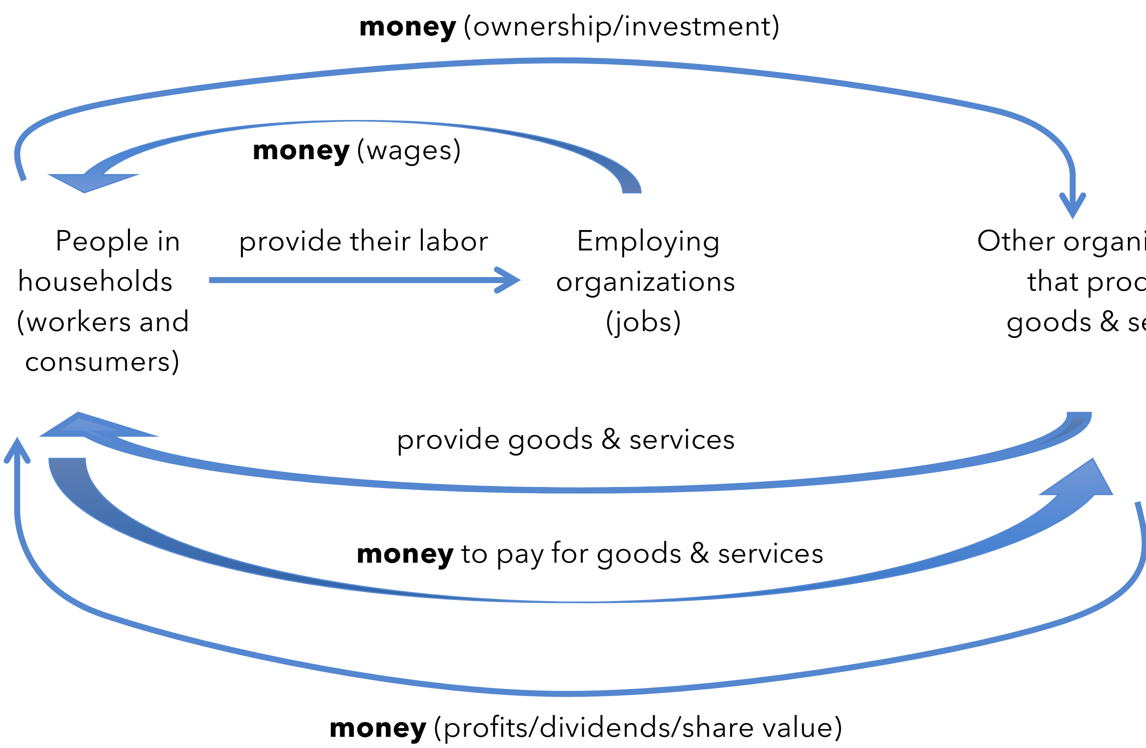
Over time, and with the advent of money, the economic situation changed so that eventually there was a separation between the unit of consumption (i.e., the household, where people lived) and the unit of production (the workplace, where people had jobs and worked to produce goods and services). As shown in Figure 3.2, people now "sold" their labor for money, typically working to produce goods and services they would not personally use. Instead, the workers used the money to purchase goods and services from a variety of organizations, most of which they were not part of. Before money, people used their labor to produce the goods and services they consumed. After money had become a generic measure of value, the goods and services that people produced became separated from the good and services they consumed. Business owners and managers could choose whom to hire (or not hire), and had some motivation to create profits by reducing labor and other input costs, increasing productivity and efficiency, and selling at the highest price the market would tolerate. During this second era, people had gained additional freedom and more choice, and there was opportunity for greater inequality than there was in the clan economy.

Figure 3.2: Simple monetized economy[12]



With the advent of corporations (i.e., businesses that are distinct legal entities that are separate from their owners, see chapter 2), the situation changed again (see Figure 3.3). As organizations grew in size and breadth, relationships between the household (worker and consumer) and the business (employer, merchant) became even more impersonal. Prior to corporations, even though production and consumption were separated, the economy was based mostly on small local organizations, with owners often living in the same community as their employees and customers. This co-location and face-to-face contact encouraged everyone to treat each other with more dignity and not merely as the means to an end.[13] In contrast, the proliferation of corporations led to increasing distance between owners, employees, and customers, thereby eroding face-to-face relationships and putting greater emphasis on quantifiable measures of success. For example, instead of seeing the smile of a satisfied customer or the pride of a worker completing a task, an owner who had no contact with the organization's operations would only see reports of sales revenue and employee productivity. Because it was the main information owners had, it grew in importance. As we noted in Chapter 2, the increased emphasis on maximizing the financial well-being of owners contributed to a self-fulfilling assumption that everyone was financially self-interested. As corporations have continued increasing in size and influence—most of the world's 100 largest economic entities are businesses, not countries—the relative power of owners and managers has increased. This has resulted in financial benefits for people in those households who are either wealthy enough to own shares in these corporations, or own shares indirectly when their pension funds invest in the stock market.[14]

Figure 3.3: Simple corporate economy



With this simplified understanding of the corporate economy in hand—and the realization that it was socially constructed, not inevitable or "natural"—we can now examine how the FBL, TBL, and SET approaches differ on the three dimensions of economic well-being: jobs, goods and services, and profits. First, we examine each dimension from the perspective that characterizes much of the management literature, namely that of managers working in high-income countries like the U.S. Second, we examine each dimension from a more global perspective, aware that most of the world earns less than $1,000 U.S. per year.[15]

ECONOMIC WELL-BEING IN HIGH-INCOME COUNTRIES

JOBS

Jobs—*that is, opportunities to get paid by an organization in return for doing work that produces goods and services*—are the first dimension of economic well-being. People generally expect managers to create jobs that allow them to meaningfully contribute to society and enable them to earn money so that they can purchase the goods and services they need to have a good life.

The FBL approach to jobs

Thanks largely to FBL management, today there are more jobs to choose from than ever before. Supporters of the FBL approach are rightly proud of its job creation record. For example, the number of jobs in the U.S. increased from about 60 million in 1950, to about 150 million in 2016 (an increase of about 250%, similar to the growth in population).[16] People entering the workforce are faced with an unprecedented number of career options, and are given an unprecedented number of educational options to prepare for the careers that they would like to pursue. Moreover, workers can work for a variety of organizations (e.g., if they are not satisfied with their pay or other work arrangements in one company, they are free to move to a competitor). All these FBL jobs were created in order to enhance employers' financial well-being.

The TBL approach to jobs

TBL management considers not only the number and variety of jobs that are available, but also the social and ecological implications of those jobs. The increase of income gaps is a particularly relevant example of how jobs can affect financial and social well-being. In the U.S. between 1950 and 1973, the increases in net productivity and hourly compensation were almost perfectly aligned, with each increasing about 95% (i.e., 1973 workers were approximately 95% more productive than their 1950 counterparts and they were also paid about 95% more). **Net productivity** *refers to the growth in the total goods and services created after taking into account the number of hours worked*. However, in the forty years following 1973, productivity increased about 80%, while hourly compensation increased by only 9%.[17] During these same forty years, the annual wages of the "top 1%" of earners increased about 140%. Prior to the late 1980s, CEOs earned about 30 times as much as a typical worker, but in 2013 that number was closer to 300 times as much.[18]

In the forty years following 1973, productivity increased about 80%, while hourly compensation increased by only 9%.

Even though there are more jobs than ever before, and productivity is steadily increasing and top earners' incomes are growing, 46 million people in the U.S. live in poverty, with one in six people not knowing where their next meal is coming from.[19] In other words, the gap between the rich and the poor has been widening. The TBL approach considers this gap worrisome because it may cause reduced job satisfaction, increased turnover costs, lower productivity, and ultimately reduction of a firm's financial performance. TBL management seeks to increase job satisfaction and reduce turnover costs, thereby contributing to a firm's financial bottom-line.[20]

The SET approach to jobs

The SET approach shares TBL management's concern for income inequality, but not only because of its effect on worker motivation, performance, and contribution to the firm's financial bottom line. SET management recognizes that income inequality is associated with other negative societal outcomes, including increased levels of anxiety, crime, homicides, obesity, and differences in how genders are treated; and with lower levels of mental health, life expectancy, social mobility, and social trust. The greater the income inequality, the lower the overall quality of life (interestingly, a widening inequality gap also worsens the quality of life for the rich).[21]

Income inequality is associated with increased levels of anxiety, crime, homicides and obesity, and differences in how genders are treated; and with lower levels of mental health, life expectancy, social mobility, and social trust.

The SET perspective also questions the traditional FBL and TBL focus on productivity maximization, an emphasis that has created unintended negative societal externalities. In particular, SET seeks to create jobs for people who may not be given a chance in productivity-maximizing FBL and TBL firms. For example, organizations like Greyston Bakery and BUILD deliberately hire ex-convicts or other groups of people who often find it difficult to get a job. These organizations may hire a person even if they need considerably more training than other candidates who are better qualified, because the goal is to help everyone to earn a living and contribute to society, not merely to maximize productivity. Some SET-oriented companies, like Montreal's Tomasso Corporation, pay their employees to volunteer in soup kitchens; these employees can then bring their volunteer experience into the company when making various decision (e.g., including who gets hired in the firm).[22]

SET management seeks to ensure that all workers are paid a **living wage**, *which is enough money to pay for the basic amenities of life, including adequate housing, food, clothing, education, and health care*.[23] A living wage is typically higher than the legal minimum wage, and indeed most of the people who earn a minimum wage do not earn a living wage.[24] Research suggests that when a firm pays a living wage it has a negligible effect on the firm's financial overall costs because it improves worker morale and productivity while reducing absenteeism and turnover.[25] And, as shown in the opening case, it makes everyone happier.

GOODS AND SERVICES

Humankind needs goods and services in order to survive. Our ability to thrive is influenced not only by how the good and services are created (e.g., jobs), but also by whether there are enough appropriate goods and services available, and whether they are affordably and sustainable.

The FBL approach to goods and services

The general goal of FBL management is to increase the quality and profitability of goods and services produced, with more being better. For example, it is common to measure economic well-being in terms of growth in **gross domestic product (GDP),** *which measures the total financial value of all the goods and services produced within a country*. The FBL approach has proven to be very successful when financial well-being is measured in these terms. Again, looking at U.S. data from 1950 to the present, there has been a net productivity increase of about 250%.[26] In other words, workers are producing 2.5 times more economic value in an hour today than they were in 1950. When combined with the 250% increase in the size of the workforce, the value of goods and services produced in the U.S. has increased more than six-fold since 1950. There are increasingly more goods and services being produced and sold. By this standard, FBL management has been very successful.

The TBL approach to goods and services

TBL management considers not only the financial value of goods and services that are created, but also their socio-ecological externalities. For example, the TBL approach promotes the development of alternative sources of energy (e.g., wind, solar), and the reduction of energy usage (e.g., LED lighting, reduced packaging) in order to increase profits and protect the environment. Industries related to alternative sources of energy have grown substantially since 1990, which is a testament to the influence of the TBL approach.

One innovation that may illustrate the TBL approach has been the development of derivatives.[27] **Derivatives** *are contracts that are based on the performance of an asset, but do not include the asset itself.* Ninety-seven percent of these contracts are simply bets such as: "I bet that in a year's time the Dow Jones Average will be 250 points higher than it is now. Otherwise I'll pay …"[28] The amount of money associated with the derivative market is estimated to be about $1.2 quadrillion per year, or about 10 times the size of the total world gross domestic product.[29] That amounts to an average of $4 million worth of "bets" being traded every second. Derivatives fit nicely with TBL thinking because they enlarge economic activity with virtually zero ecological cost (though, as described below, derivatives have unintentionally contributed to negative social externalities).

The SET approach to goods and services

Rather than focusing on getting more goods and services, the SET approach recognizes that many of us already consume more goods than the planet can sustain. SET management emphasizes the ideas of sustenance economics, questioning the FBL view that economic growth is always good. A first step in building a sustainable economy requires recognizing when enough is enough, and that having more than enough may actually impoverish other aspects of our lives.[30] This view inverts the logic of economists like Henry Wallich who argue that: "Growth is a substitute for equality of income. So long as there is growth there is hope, and that makes large income differentials tolerable." If this claim is true, namely that growth and income equality are substitutes, then the SET approach prefers the corollary: "Greater equality of income is a substitute for growth."[31]

Akin to TBL management, the SET approach seeks to improve organizational performance via innovative technologies that enhance socio-ecological well-being. However, unlike FBL and TBL approaches, SET management actively and deliberately challenges the thinking that more consumption and more sales and more revenue are necessarily better. SET asks questions such as: What if we already have too many goods and services on the market? Do we really need to purchase 68 new garments a year?[32] Do we really need the 50% increase in square footage per person in our homes compared to what we had 50 years ago? Do we really need the latest version of an iPhone? Do we really need to own our own car? Can we live better with less?

From a SET perspective, wanting more than enough goods, and spending the time (and earth's resources) to produce and acquire them, is dysfunctional and unethical -- especially in a world where many people do not have enough.

The SET approach is consistent with research that shows that engaging in voluntary simplicity make people happier.[33] For example, people appreciate having more time to cook home-made meals and to visit with friends in person. From a SET perspective, wanting more than enough goods, and spending the time (and earth's resources) to produce and acquire them, is dysfunctional[34] and unethical -- especially in a world where many people do not have enough.[35]

PROFIT

The word profit is used here in its most general sense, namely to indicate that there is a "proper fit" (pro-fit) between the goods and services an organization produces (value creation) and the financial resources it is able to earn because of it (value capture). Such a general definition can also apply to non-profit and government organizations, where it is akin to having a balanced budget. For example, an organization like World Vision needs to ensure that it has enough funding to pay for the work it does.

The FBL approach to profit

The FBL approach seeks to maximize financial profits by increasing the financial value it captures from the goods and services it offers. Consistent with the acquisitive economic perspective, FBL management defines the profit dimension of economic well-being in terms of money made. And the track record of FBL management is impressive in these terms. For example, with few exceptions (e.g., the recession of 2008), corporate profits in the U.S. have grown every year since 1950 (from $15 billion to $1,500 billion),[36] and the economic GDP of the U.S. has been doubling every 25 years or so.[37]

The profitability success of financial institutions may be an example of the FBL approach at its best. In the U.S., the proportion of total GDP generated by the finance and insurance industry grew from 2.8% in 1950, to 4.2% in 1970, to 6.6% in 2013. This industry also accounted for 10% of total profits (of all sectors in the U.S. economy) in 1950, which grew to 24% in 1970, and to 37% in 2013 (and had reached a high of 60% before the 2008 recession).[38] Bankers have benefited from deregulation and opportunities to lend more money than they have on reserve, thereby literally growing the size of the economy (and in doing so creating value for society) in profitable ways (increasing the banks' capture of financial value). The pay of jobs in the banking industry are also noteworthy: people working in finance earned 50% more money than employees with a similar education working in other parts of the economy.[39]

The TBL approach to profit

The TBL approach is also most concerned with financial profit, but it proposes different means for achieving it. Many studies showing that "it pays to be green,"[40] suggesting that TBL management's focus on the triple bottom line is more profitable than FBL management's limited focus on just financial issues. From a TBL perspective, it makes sense that profits would increase for companies who reduce their ecological input costs (e.g., who reduce the energy used to light their facilities) and who find cost-effective ways to improve worker motivation and productivity (e.g., flextime, casual dress Fridays). Organizations like Walmart and GE demonstrate the benefit of TBL thinking.

The SET approach to profit

While FBL and TBL supporters are justifiably proud of generating impressive financial profits, the SET perspective questions the unsustainable and insatiable pursuit of material and financial wealth. Instead, the SET approach favors measures of economic performance that take into account positive and negative socio-ecological externalities. For example, the developers of the GDP measure never intended for it to be used as a reflection of a nation's economic well-being.[41] They note, for example, that GDP goes up when someone steals a car because the owner then needs to spend money replacing it. It also goes up when criminals are put in jail (which creates jobs at the prison), or when an oil pipeline bursts (and the pollution needs to be cleaned up). GDP also goes up when toxins in the air create illness and hospital expenses, and when mental stress creates the need for psychiatrists and medication.

The SET approach suggests measuring economic success via something like the **Genuine Progress Indicator (GPI)**, *a measure of quality of life based on the following elements:*[42]

Income distribution: GPI increases when relatively poor people receive a larger portion of national income, and decreases when their share declines.

Crime: Unlike GDP, which grows with costs of crime (e.g., legal costs, property damage, and healthcare), GPI subtracts these costs.

Resource depletion: Unlike GDP, which ignores externalities like the depletion and degradation of forests, farmland, wetlands, and nonrenewable minerals, GPI treats these as costs.

Pollution: Unlike GDP, which often double-counts pollution (first for the costs incurred in creating pollution, and second for the costs of cleaning up pollution), GPI subtracts costs of water and air pollution based on their damage to the environment and human health.

Long-term environmental damage: GPI recognizes the negative financial externalities associated with carbon emissions.

Leisure time: GPI goes up with increases in leisure time, and down with decreases.

Since 1970, there have been impressive increases in GDP in high-income countries, but virtually no improvement in GPI.

SET management also makes a distinction between two types of profit: conventional and genuine. **Conventional profit** *refers to the difference between a firm's financial expenses and its financial revenues* without taking into account negative socio-ecological externalities (e.g., without taking into account the $2 trillion in negative ecological externalities associated with the world's 3,000 largest corporations). **Genuine profit** *refers to the difference between a firm's financial expenses and its financial revenues after taking into account its socio-ecological externalities.* For example, a firm might voluntarily pay fees in order to take into account the negative externalities associated with greenhouse gas (GHG) emissions, such as is evident in companies that purchase carbon offsets when employees travel by air. Or, a firm may refuse to have their products made in overseas factories that use child labor or have oppressive working conditions.[43] Everlane is an example of a clothing company that tries to earn *genuine profits*. It has a transparent supply chain, allowing anyone to read about the working conditions in the factories where its products are made. In addition to telling customers where they purchase their goods, it tells them how much they cost, and what their mark-up is.[44]

Economic Well-Being at a Global Level

Thus far, we have focused our discussion on managing economic well-being within the context of high-income countries. We will now adopt a more global perspective, which draws greater attention to the challenges of economic well-being facing people in low-income countries.

JOBS IN A GLOBAL CONTEXT

The FBL approach to jobs

The FBL philosophy for improving the global economy can be summed up with the basic idea of "free trade" and the maxim that "a rising tide raises all boats." **Free trade** *refers to the idea that goods and services can flow across national and international boundaries without financial barriers (i.e., tariffs, quotas, or subsidies).* The assumption underlying the FBL philosophy is that everyone will benefit if we remove trade barriers between countries. When jobs, goods and services, and money can flow freely across borders the invisible hand will guide them to the most productive locations and uses, so that the total global economy will maximize output and income.[45]

Our highly-developed international transportation systems, coupled with the ability to communicate instantly around the world, is helping to put the FBL vision for the global economy into practice. Factories can be located wherever labor costs are the lowest, and products can be shipped to wherever demand is greatest. Indeed, this **globalization**—*which refers to changes in economics, technology, politics, and culture that result in increasing interdependence and integration among organizations and people around the world*—is the genius of the FBL approach because it creates financial incentives for multinational corporations to create jobs in economically-depressed regions of the world. Since businesses are motivated to reduce their financial costs, they will be motivated to locate factories in countries where people are willing to work for a low salary. Having jobs move to places where they are most needed offers potentially a win-win-win proposition. Shareholders "win" because financial labor costs will be reduced, consumers "win" because the prices of goods can be reduced, and unemployed people "win" because they get a paying job. Those jobs will also help to grow the economies in low-income countries. One reason the average American can afford 68 new garments a year is because their costs have decreased thanks to jobs moving to low-income countries. Today 90% of garments purchased in the U.S. are imported, whereas as recently as in 1990 only 50% were imported.[46]

One reason the average American can afford 68 new garments a year is because 90% of garments purchased in the U.S. are imported.

Proponents of FBL management point out that globalization has had a positive effect on the world's poorest people. For example, the proportion of people in the world living in extreme poverty (i.e., spending less than $1.90 international dollars per day) decreased from 82% in 1910, to 60% in 1970, to 37% in 1990, to 10% in 2014.[47]

The TBL approach to jobs

TBL management is interested not only in the number of jobs that are created, but also in the quality of those jobs. A study by the World Bank that interviewed 20,000 poor people from more than 40 countries found that when discussing work, people didn't talk so much about wanting money per se. What they wanted was a secure job where they could earn enough money to provide their families with food, clothing, shelter and education.[48]

The proportion of people in the world living in extreme poverty decreased from: 82% in 1910, to 60% in 1970, to 37% in 1990, to 10% in 2014.

However, because of the relative power advantage that large organizations have over unemployed people in low-income countries, poor people have little negotiating power. Indeed, many of the new jobs that have been created via globalization do not pay a living wage and have terrible working conditions. The TBL management response to such conditions has been the development of third-party accreditation agencies that monitor overseas working conditions. For example, Worldwide Accredited Responsible Production (WARP) is a nonprofit, independent association of social compliance experts that promotes and certifies humane, ethical, and lawful manufacturing around the world.[49] Improving working conditions offers TBL firms many benefits, including helping them to maintain a positive brand image with consumers. As well, one study found that paying factory workers 20% above the industry average and establishing a welfare fund for workers improved profitability.[50] Similarly, other research suggests that firms who care enough for workers and the environment to be listed on the Dow Jones Sustainability Index (DJSI) can enjoy significant financial gains.[51]

The SET approach to jobs

The SET approach seeks to create jobs that treat all people with dignity and respect. Such jobs are lacking in low-income countries, even among well-known FBL and TBL corporations. For example, Apple Computers has been criticized for having their iPhones assembled by factory workers who work long hours in conditions that make them prone to suicide.[52] In contrast, SET management is evident in firms like *31 bits*, the jewelry manufacturer who teaches its employees—Ugandan single mothers— literacy and business skills (see opening case of Chapter 1).

The SET approach is reflected in the jobs created by the best practices of **fair trade**, *which tries to ensure that workers in low-income countries are paid a fair price for the products they produce.* Fair trade helps consumers to respect producers, and provides transparency so that consumers know the working conditions of producers. Fair trade allows consumers in high-income countries to use their purchases to reduce income inequality, while benefitting the environment by providing eco-friendly products.[53] The mission of the World Fair Trade Organization is "to enable producers to improve their livelihoods and communities through Fair Trade."[54] Although they can be challenging to put into practice,[55] key principles of fair trade include: paying a *fair* price (vs. paying the *lowest* price the market will withstand), gender equity (women are persistently underpaid in many parts of the world), healthy working conditions (no sweat shops or child labor[56]), mutual respect between producer and consumers, and environmentally-friendly practices. The Fairtrade mark, which first appeared on just three products in the UK 1994, now appears on 30,000 products offered by about 1.5 million farmers and producers belonging to about 1,250 producer organizations from 74 countries. Fair trade products are sold in 130 countries.[57] An example is the Day Chocolate Company, which is 33% owned by cocoa farmers from Ghana.

GOODS AND SERVICES IN A GLOBAL CONTEXT

The FBL approach to goods and services

FBL management encourages the free movement of goods and service across international borders via minimizing tariffs, quotas, and government subsidies. **Tariffs**—*which are taxes on goods or services entering a country*—protect domestic companies from international competitors. **Quotas** *place restrictions on the quantity of specific goods or services that can be imported (or exported).* Government **subsidies** *are direct or indirect payments to domestic businesses that help them compete with foreign companies*. For example, farmers in high-income countries received about $500 billion dollars in subsidies in 2016 to allow their domestic agricultural products to be price-competitive in global markets.[58]

FBL management encourages the free movement of goods and service across international borders.

Free trade is enhanced by general trade agreements. The World Trade Organization (WTO) strives to make it easier for goods to flow among member countries by urging countries to lower tariffs and to work toward free trade and open markets. Created in 1995, the WTO has over 160 member countries that represent 98% of global trade. In addition to the WTO, there are a series of regional free trade agreements among different countries. Many of these have been facing considerable opposition, for a variety of reasons (e.g., they are perceived to favor large international corporations rather than smaller locally-owned firms, and they restrict the ability of governments to create regulations for their local jurisdictions). The North America Free Trade Agreement (NAFTA) eliminates numerous tariff and non-tariff barriers between the U.S., Mexico, and Canada. It was signed in 1994, and affects over 475 million consumers and about $1 trillion dollars in annual economic activity. NAFTA was an important election issue in the 2016 U.S. election, when President Trump made it a priority to renegotiate NAFTA with more favorable terms for the U.S.

The European Union (EU) is a group of almost thirty European countries committed to making trade among members easier by lowering tariffs and other impediments to trade. But the EU is much more than simply a general trade agreement. The EU comprises about 500 million consumers, and has a common currency (the euro) to facilitate trade among member nations that is now part of the everyday life of more than 300 million Europeans in 19 countries. The EU has faced its share of difficulties in the past few years, including a vote in 2016 for the UK to leave the EU (the so-called "Brexit"). There are various other free trade organizations as well. For example, the Association of South-East Asian Nations (ASEAN) includes 10 nations and 625 million people in one of the fastest-growing economic regions in the world.

Enabled by free trade, global GDP increased from $7 trillion in 1950 to $77 trillion in 2011 (a tenfold increase), during which time the global GDP per capita went from $2,750 to $11,000 (a fourfold increase).[59] During the past decade, global GDP has increased about 3.5% per year, with low-income countries averaging about 5.5% per year while high-income economies averaged less than 2%. The FBL approach counts this larger growth in low-income countries as a success, and support for the maxim that "a rising tide raises all boats."

Global GDP increased from $7 trillion in 1950 to $77 trillion in 2011, and global GDP per capita went from $2,750 to $11,000.

The TBL approach to goods and services

Like the FBL approach, TBL management supports free trade because firms can become more profitable if they expand their markets to include consumers in foreign countries. In particular, TBL encourages firms to develop low-priced goods and services for relatively poor people because this both empowers the poor by welcoming them into the globalized economy, and because this allows the firm itself to create more revenue and a larger customer base. This is the basic idea behind what is known as the Base of the Pyramid (BOP) strategy, which has developed alongside TBL theory. As defined in 1998 by C.K. Prahalad and Stuart Hart, the BOP refers to the billions of people who live on less than $2 per day. For example, in 2007 UK-based Vodafone helped launch M-PESA to provide financial services to poor people in Kenya via their mobile phones. The venture has generated healthy profits for the company, and by 2017 had created jobs for over 100,000 agents while serving about 20 million customers. M-PESA facilitated US$50 billion in annual transactions that have created an estimated US$1.8 billion in social value.[60] Extensions of BOP theory have been developed to encourage firms from high-income countries to partner with communities in low-income countries in order to co-create mutually beneficial businesses that produce goods and services in low-income countries.

Compared to the FBL approach, TBL management is more attuned to the potential financial benefits that can come from developing goods and services that are not directly valued in the high-income marketplace. For example, from an FBL perspective, R&D expenditures in the pharmaceutical industry should seek to develop drugs that target the concerns of people in high-income countries (e.g., like the top-selling drugs for obesity, sleep disorders, and sexual dysfunction), rather than to develop drugs for people in low-income countries (who can't afford to purchase them). A TBL approach agrees, but also recognizes that its long-term profits can be enhanced by developing drugs for low-income marketplaces. For example, a TBL approach is evident in the actions of pharmaceutical company Merck, which helped to develop a product called Mectizan that can prevent river blindness, a disease prevalent among the poorest people in the world. Merck supplies Mectizan for free to anyone in the world who needs it, and works with organizations such as the World Bank and the World Health Organization to distribute medicine in remote areas where it is needed. Merck's managers believe that actions like these help to make their firm more attractive to the world's best scientists, because they know that discoveries at Merck may reach sick people regardless of their economic status.[61]

The SET approach to goods and services

The SET approach also supports international trade agreements, but is more interested in fair trade than in free trade. Consistent with the rise of SET management, the fair trade movement is growing in consumer awareness. For example, Fairtrade International reported that its sales grew at a rate of about 30% per year between 2004 and 2012.[62] Along the same lines, between 2011 and 2013 the proportion of U.S. consumers who recognized fair trade rose from 24% to 55%. This growth seems to represent a great opportunity for the future, because worldwide fair trade sales were only $6.2 billion in 2013, representing only .03% of the global retail sales market.[63] Still, if sales continue to increase at the rate of 30% per year, that would mean sales of almost $40 billion by 2020, and over $600 billion by 2030. That level would provide a living wage for 150 million people who do not currently have one.

Unlike FBL and TBL approaches, SET management has misgivings about conventional international free trade agreements for two reasons. First, free trade benefits the rich more than the poor. While it is true that free trade agreements have been associated with impressive growth in the global economy, it is not clear that this has been a win-win proposition. The disparities between rich and poor have been increasing, both within and across countries, and the wealthy have benefited more from globalization than the poor.[64] Worldwide, 95% of the economic benefits of globalization go to the richest 5% of the world.[65]

Globally, 95% of the economic benefits of globalization go to the richest 5% of the world.

Second, international trade agreements may undermine national sovereignty, as illustrated by instances where a government is prevented from making changes that would improve domestic ecological or social conditions.[66] For example, when Denmark tried to introduce an environmentally-friendly law requiring that all beverages be sold in returnable containers, it was struck down by the EU because it inhibited the free movement of goods.[67]

Rather than support tariffs, quotas, and subsidies that allow the relatively rich and powerful companies and countries to maintain or gain further economic advantage, SET management is more likely to favor subsidies for low-income countries to develop their economies, and for practices that benefit the natural environment. For example, the current $500 billion in agricultural subsidies in high-income countries cause unintended negative externalities for farmers in low-income countries (and for the natural environment, see Chapter 4). These subsidies represent $1,000 per year for each of the world's 500 million small-scale farmers, a large portion of whom earn less than that in a year. Indeed, the unwillingness of high-income countries to reduce their barriers (e.g., tariffs and subsidies) to agricultural exports from low-income countries has been a long-standing reason for the impasse in WTO negotiations to liberalize world trade.[68] SET management supports free trade where the poor get a greater share of the benefits.

PROFITS IN A GLOBAL CONTEXT

The FBL approach to profits

The FBL management goal with regard to global profit is to maximize overall financial gains, with little regard for who receives them. Consistent with its consequential utilitarian ethic, the FBL approach is more concerned with total profit than with its distribution. Towards this end, international financial institutions that make it easier for money to flow across borders have been an important factor in creating the increases in global GDP.[69] This flow of money is facilitated by the International Monetary Fund (IMF), an organization with about 200 member countries, which was established to: 1) promote orderly and stable international monetary exchange; 2) foster international economic growth and high levels of employment; and 3) provide temporary financial assistance to countries to help ease balance of payments problems. To meet these goals, the IMF monitors international commerce and provides financial and technical assistance.[70] This allows capital to move to where it receives the highest return, and limits national boundaries and governments from constraining economic investment. Global corporate profits rose from 7.6% to 9.8% of global GDP between 1980 and 2013.[71]

Global corporate profits rose from 7.6% to 9.8% of global GDP from 1980 to 2013.

The TBL approach to profits

As noted earlier, TBL management is concerned with total profits, but also with the growing income gap that results from FBL practices. There is extensive evidence that there is a widening gap between rich and poor, both within and between countries. For example, the income gap between U.S. and south Asia and Latin America has tripled since 1960. This is true not only in terms of absolute wealth (the richest 1% have as much wealth as the rest of the world combined), but also in terms of income. [72] Recall that 95% of the economic benefits of globalization go to the richest 5% of the world.

To address this widening gap, the TBL approach promotes the work of institutions such as the UN Global Compact, which is the world's largest initiative for corporate sustainability and is built on principles of labor standards, the environment, human rights, and anti-corruption. Research suggests that profits increase for firms—like the Tata Group, Gerling, and Lego—who sign on with the Global Compact. [73] TBL management also supports the World Bank, an organization that provides financial and technical assistance to reduce poverty in low-income countries.[74] The World Bank—owned by about 200 countries—provides interest-free credit, low-interest loans, and grants to low-income countries for purposes like healthcare, education, and infrastructure. Often these financial services have been linked to Structural Adjustment Programmes, which are designed to ensure that low-income countries have balanced budgets and play according to the rules of a free market. Promoting free market principles can serve the interests of the high-income funding countries as much—and sometimes more—than the economic interests of the low-income countries. For example, Structural Adjustment Programmes have discouraged subsidies and tariffs in low-income countries, which has made it difficult for them to compete with the subsidies and tariffs from high-income countries, and thus have been argued to have an unintended negative effect on the economies of low-income countries.[75]

The SET approach to profits

While the intent of allowing money to flow freely across nations may be to make everyone better off, this has often not been the outcome.[76] In fact, critics suggest that the easier flow of money has created several negative externalities. The vast majority of money being traded, and a lot of the profit being generated, does not contribute to productivity in any real sense. The example of $1.2 quadrillion in derivatives is a case in point. Even though a billion dollar bet on the outcome of a Super Bowl game may increase economic activity, it does not grow food or sew garments. In fact, financial tools like derivatives contributed to the international recession of 2008, and to income inequality.[77]

The $1.2 quadrillion derivatives market does not contribute to productivity in any tangible way, but it worsens income inequality.

As a result, the goal of SET management is to reform the flow of money so that it is better aligned with sustenance economics. Perhaps the most notable reformer is Nobel prizewinner James Tobin, who in the 1970s anticipated some of the difficulties that have arisen from the deregulated flow of capital, and suggested a simple 1% tax on all foreign currency transactions. This 1% tax would ensure that financial transfers were based more on "real" changes in production and market opportunities, instead of gambling based on the acquisitive economics of investors. In other words, the Tobin tax favors SET *investors* who are interested in the long-term, and penalizes FBL *traders* who are looking for quick profits. For example, gone would be the day where traders purchase $100 million worth of Japanese yen only to sell them 15 minutes later for a profit of $10,000 when their value increases by .01% (the profit from such a transaction would be insufficient to pay the Tobin Tax, in this case, $1 million). The Tobin Tax would also give national governments greater freedom to change interest rates in their jurisdictions. There is widespread agreement that the Tobin Tax is theoretically brilliant, but it has yet to be implemented because it conflicts with the dominant FBL understanding of the free movement of capital.[78]

Despite the lack of a Tobin Tax, there is other evidence that the SET principles are gaining influence. For example, about $23 trillion (over 25% of professionally managed assets[79]) is invested in accordance with responsible investment strategies where investors invoke criteria that go beyond financial profit. This practice is called **socially responsible investing** (SRI), *where investment decisions are based on financial and ethical considerations, including an organization's social, environmental, and governance performance*.[80] This style of investing reflects investors' non-financial agendas for organizations, knowing that financial performance may not be maximized.[81] SRI investors desire a fair financial return on their investment, but also recognize that their financial concerns must be balanced with treating other stakeholders fairly. For example, investors' well-being may be served by earning adequate financial rewards *as well as* by providing employment for marginalized people in society, minimizing the environmental costs of organizational initiatives and products, considering the social costs of opening new factories overseas, and so on.

The Tobin tax favors long-term investors *and penalizes* traders *who look for quick profits.*

Entrepreneurship Implications

Having explained the important concepts related to economic well-being, we now provide some concrete examples of how organizations influence economic well-being. These examples are meant to illustrate different concepts, show how organizations affect economic outcomes, and to inspire you to think about entrepreneurial opportunities that may be addressed by your Entrepreneurial Start-Up Plan (ESUP).

FBL ENTREPRENEURSHIP AND ECONOMIC WELL-BEING

Some of the largest organizations and best-known entrepreneurs have embraced FBL management. For example, consider Jack Welch, our exemplar of an FBL manager from Chapter 1, the "manager of the (previous) century," and the man who guided GE to become the first billion-dollar business in the world. Recall that one of his intrapreneurial innovations was to shut down profitable divisions within GE simply because they were not profitable enough. Welch was willing to create considerable negative social externalities in the name of maximizing profits for GE.

A second example of a very successful FBL-oriented entrepreneurship is provided by multipreneur Martin Shkreli. As the founder and CEO of Turing Pharmaceuticals, he purchased Impax Laboratories, which held the patent for a drug called Daraprim. Daraprim is the only drug available that effectively treats some life-threatening forms of malaria, as well as AIDS and some cancers. Knowing that he had a monopoly, Shkreli increased the price of Daraprim by 5,000%, from $13.50 per tablet to $750 per tablet.[82] From an FBL perspective, this was a brilliant business decision that greatly increased profits, but it was also a decision that created enormous negative social externalities.

In a similar move, but this time an example of FBL intrapreneurship, pharmaceutical company Mylan took what was once a throw-away product—its EpiPen—and made it into a huge profit-maker (more than $1 billion dollars per year).[83] An EpiPen is a device with a needle that injects epinephrine into the bloodstream to save the life of someone having an extreme allergic reaction. Each EpiPen contains about $1 worth of epinephrine. In 2007, EpiPens were sold in American pharmacies for $50 each;[84] the current price is more than $300 each.[85] This strategy has created great wealth for Mylan and its executives, but has created considerable negative externalities for individuals and institutions who rely on EpiPens. However, Mylan CEO Heather Bresch seems to downplay these negative externalities when she suggests that "her company has attained a sort of capitalist nirvana—it does good for others while doing well for itself."[86]

An especially interesting example to consider is Walmart, which achieved great success as an FBL company but has more recently earned a reputation as a TBL company. In its pursuit of FBL goals, Walmart became known for designing jobs that pay employees as little as possible (and often limit their hours to part-time in order to minimize the need to pay employee benefits), and for pressuring suppliers to keep prices low (which creates poor-paying jobs in the supplier organizations). As a measure of the phenomenal success of Walmart's FBL management approach, consider that the wealth of the Walton family is equivalent to the total wealth of the poorest 130 million people in the U.S.[87]

This final point merits further comment, as it draws attention to entrepreneurial opportunities related to the **local multiplier effect**, *which refers to the enhanced financial well-being a community gains when it supports locally-owned*

The local multiplier effect refers to the enhanced financial well-being a community enjoys when it supports locally-owned businesses.

businesses.[88] In the example of Walmart, consider that for every dollar spent making a purchase from a national retailer, 14 cents stay in the local community (e.g., in the form of wages for clerks). In contrast, 52 cents of every dollar spent at locally-owned retailer stays in the community (e.g., wages for employees, more locally-sourced products, and profits). Along the same lines, for every new retail job that Walmart creates in a community, on average 1.4 other jobs are lost in that community.[89] Note that there are also differences in types of jobs created by local versus nationally-owned businesses, with locally-owned firms being more likely to hire local professionals like accountants and marketers and information system experts. The more aware consumers are of how the local multiplier works, the more opportunities there are expected to be for local entrepreneurs.

TBL ENTREPRENEURSHIP AND ECONOMIC WELL-BEING

Firms managed with the TBL approach often have effects on jobs, goods and services, and profits that are similar to those of FBL managed firms, but with reduced negative externalities in situations where it is profitable to do. This similarity comes from the fact that like FBL, the TBL approach is focused on maximizing monetary profit, that is, TBL management advocates social and ecological initiatives when they promise financial gain. For example, thanks to the intrapreneurial initiatives of then-CEO Lee Scott, Walmart moved away its former FBL approach and is today considered a leading TBL organization thanks to its innovations in reducing energy use and waste production. Each of these innovations reduced costs (and so increased profits). Walmart is still looking to find better ways to profit from increasing job quality, but in the meanwhile is still criticized for its treatment of employees.

SET ENTREPRENEURSHIP AND ECONOMIC WELL-BEING

Because of it is not seeking to maximize financial well-being as its primary motive, the SET approach to entrepreneurship is remarkably different from the FBL or TBL approaches. For example, FBL and TBL entrepreneurs would not be likely to decrease their $1 million salary in order to raise the minimum wage in the firm to $70,000 (opening case). Similarly, traditional (FBL-oriented) jewelry businesses would never think of providing education and training for single Ugandan mothers to make jewelry out of recycled paper (see the opening case in Chapter 1) because there would be lower return on the money invested. And a non-SET-oriented bakery would never think of hiring people without investigating their qualifications and their criminal backgrounds (see the Greyston Bakery in Chapter 1).

Chapter Summary

1. There are two key varieties of capitalism:

   i) documentational capitalism, which emphasizes detailed written contracts, public financial reports, management rights, and short-term maximization of financial performance; and

   ii) relational capitalism, which emphasizes relational contracts, long-term reputation and financial firm performance, employee rights, and the needs of all stakeholder groups.

2. There are two key varieties of economics:

   i) acquisitive economics, which refers to managing property and wealth to maximize the short-term monetary value for owners; and

   ii) sustenance economics, which refers to managing property and wealth to increase the long-term overall well-being for owners, members, and other stakeholders.

3. Three key outcomes are typically used to measure success in terms of economic well-being: jobs, goods and services, and profit.

4. When it comes to managing economic well-being in high-income countries:

   • FBL management emphasizes creating jobs, maximizing productivity, and maximizing profits.

   • TBL management emphasizes creating good jobs, sustainable development, and maximizing profits.

   • SET management emphasizes balancing jobs and leisure, enhancing positive socio-ecological externalities, and maximizing genuine progress indicators.

5. When it comes to managing economic well-being from a global perspective:

   • FBL management emphasizes creating jobs for the poor, free trade, the free flow of money, and maximizing global GDP.

   • TBL management emphasizes creating good jobs for the poor, sustainable development, and empowering the base of the pyramid.

   • SET management emphasizes creating jobs that pay a living wage, fair trade, and genuine progress indicators.

6. Entrepreneurs reflect and reinforce these emphases, with FBL- and TBL-oriented entrepreneurship seeking maximum financial return, while SET-oriented entrepreneurship addresses societal expectations and ecological needs regarding jobs, goods and services, and profits.

Questions for Reflection and Discussion

1. Does the country you live in place greater emphasis on documentational or on relational capitalism? Do you see that changing during your career? Why or why not? What effect do you think this has on what is taught in business schools in your country? Explain your reasoning.

2. Do you think it is appropriate that modern acquisitive economic theory assumes people will act in a self-interested way and will cheat to get what they want? Do you agree that these assumptions become self-fulfilling prophecies? How do you react when people don't trust you to act with integrity?

3. Free trade promotes the free flow of economic assets. In practice, we usually discuss the flow of money or goods and services. However, the theory is meant to apply to all assets, including labor (i.e., people should be free to move from one country to the next, as in the European Union). What do you think about this claim? Does it make sense to abandon citizenship and travel regulations to support free trade? Why or why not?

4. Which do you prefer: free trade or fair trade? Explain your reasoning.

5. What is the difference between Gross Domestic Product (GDP) and the Genuine Progress Indicator (GPI)? Given that the economists who developed GDP did not intend or want it to be used as a measure of economic well-being, why do you think it has become so popular? What changes would you expect if GPI became the new norm? How likely is that to happen?

6. What is the difference between an *investor* and *trader*? In your answer refer to Figure 3.3. Again referring to Figure 3.3, what sorts of regulations and norms could be developed so that businesses would pay greater attention to socio-ecological externalities?

7. What are the tensions and dilemmas that entrepreneurs encounter when they seek to implement FBL, TBL and SET ideas in their new ventures?

8. You have read about numerous entrepreneurs who identified economic opportunities and built organizations to address them. How might you do the same? What economic trends do you see that suggest an entrepreneurial opportunity? What gaps or problems exist? What solutions are needed? What do your answers suggest regarding possible new goods or services that an entrepreneur might offer to create value?

SPACE TO WRITE DOWN YOUR REFLECTIONS & NOTES

Preview and Summary of Chapter 4

	FBL	TBL	SET
Approaches Different ways to manage ecological well-being issues	- Unawareness - Obstructionist - Minimalist/legal	- Listen to consumers - Use resources efficiently - Protective/legal	- Proactive - Stakeholder-centric - Place-based organizing
Energy How to manage issues related to carbon economy (e.g., GHG emissions, pollution)	- Ignore issues on climate change - Undermine change efforts - Adhere to letter of the law	- Respond to market (e.g., Tesla) - Reduce costs via efficiencies - Lobby for carbon tax	- Treat natural environment as stakeholder - Accept inconvenience (e.g., bike) - Reduce consumerism (e.g., slow fashion)
Food systems How to manage issues related to food systems (e.g., waste, reduced biodiversity)	- Ignore food-related issues - Refuse access to CAFOs - Adhere to friendly laws	- Create new industries (e.g., organic foods) - Train workers to minimize waste - Lobby for favorable laws	- Work with ecological activists - Connect with organic locavores - Slow Food movement; de-commodify food
Human health How to manage issues related to food systems (e.g., effect of pollution)	- Ignore health-related issues - Hide embarrassing information - Follow letter of law	- Introduce healthier products - Become more efficient at providing healthier options - Work to create favorable health standards	- Promote active living - Offer healthier foods - Precautionary principle
Entrepreneurship Opportunities	Fossil fuels industry	Trends to eat less meat, reduce GHG energy	Soil-enhancing agricultural practices

CHAPTER 4: MANAGEMENT AND ECOLOGICAL WELL-BEING: ENERGY, FOOD SYSTEMS, AND HEALTH

Learning goals

After reading this chapter, you should be able to:

1. Explain difference in the FBL, TBL, and SET approaches to ecological well-being.

2. Describe the carbon cycle, and identify positive contributions and negative externalities associated with carbon-based energy.

3. Identify problems and opportunities that exist in the global food system.

4. Explain the linkages between ecological well-being and human health.

5. Identify entrepreneurial opportunities related to ecological well-being.

FOOD FOR THOUGHT[1]

Dan and Wilma Wiens are SET entrepreneurs from Canada who have helped to change the way people around the world think about, grow, and consume food. Dan and Wilma were high school sweethearts who grew up in the city, and always had a strong interest in improving the world's relationship with food. While Wilma earned a degree in nutrition, Dan earned a degree in agriculture. In the 1980s, shortly after they were married, they moved to Swaziland, where Dan helped local schools to improve the way they taught agriculture. Dan and Wilma soon realized that, in order to solve problems related to the international food system, they would need to educate people to live more responsibly back home in Canada. It is ironic that people in so-called developed countries know so little about food systems; most cannot identify ten local plants, but are able to identify 1,000 company logos.[2]

Soon Dan and Wilma had started a small-scale organic vegetable farm (about 3 acres/1 hectare), and sold their produce in a nearby farmers' market under a hand-written banner “Organic Vegetables.” At that time (the early 1990s), customers would come by and ask why their vegetables weren’t cheaper than the neighboring vegetable stands (these customers failed to realize that cost savings from not using chemicals would be counter-balanced by increased labor costs for weeding).

Dan believed that there must be a better way to sell his veggies, so he assembled a group of friends and acquaintances to brainstorm ideas. They came up with a variation of Community Supported Agriculture (CSA). CSA works like this: consumers (called “sharers”) purchase, in advance, shares of a farm’s harvest. The harvest is distributed to the sharers as it ripens during the growing season, which is about 13 weeks long in the case of Dan and Wilma’s farm.

A local newspaper ran a short story about their CSA, and within 24 hours the local telephone operators had received requests from over 200 people asking for the phone number of Dan and Wilma Wiens. Soon their farm was fully subscribed and also had a waiting list of people wanting to become sharers. People were eager to support an idea that seemed right for the time.

Because sharers have gotten to know Dan and Wilma, and many volunteered to actually work on the farm, they have become trusted friends. After the first year of operation, Dan assembled some sharers, showed them the farm’s financial statements, and asked them to set the share price for the next season. The sharers raised the price by 40%. Over the years the farm’s harvest has been compromised due to the driest and the wettest summers on record. However, rather than complain about the lack of vegetables, some sharers anonymously gave their farmers some cash.

Because Dan and Wilma use organic agronomic practices to grow their food, sharers know that the vegetables from their farm have not been sprayed with harmful chemicals. At the same time the quality of soil on the farm has been enriched, and each year as much as one-third of a tonne of carbon/hectare has been sequestered from the atmosphere and put into the soil.[3] But their farm is not officially certified organic because, on a per hectare basis, it is much costlier for a small-scale farmer to pay the certification costs than it is for large-scale organic farmers.

The Wiens’s model has spread. Some of Dan and Wilma’s sharers have started their own CSAs. Dan has run educational workshops and mentored people around the country who want to start a CSA. Dan and Wilma made arrangements so that a nearby plot of land could be farmed by people from the inner-city, and encouraged the start-up of another farm operated by recent immigrants specializing in vegetables that are important in their heritage. The

Wiens's children have taken over the farm operations, and two have started their own SET businesses: one operates a bakery that features organic sourdough bread with local ingredients, and the other a small-scale free-range hog operation.

In the meanwhile, Dan has returned to international development work, where he has helped to raise millions of dollars to promote the kinds of Conservation Agriculture (CA) practices he uses on his farm among thousands of the world's poorest 500 million small-scale farmers. CA helps farmers to double their agricultural productivity while enhancing the quality of their soil without external inputs (e.g., without fertilizers).[4] Innovations like CA can be life-changing: about 70% of the world's 800 million chronically-malnourished people are from rural areas,[5] and the negative externalities associated with global malnutrition have been estimated to be US$3.5 trillion per year.[6]

There is a growing consensus that managers in all kinds of organizations must increase their awareness of and knowledge about fundamental ecological issues and systems. Both businesses and other types of organizations have a significant impact on the natural environment, but they also have great opportunities to reduce negative externalities and enhance positive externalities. In this chapter, we describe the differing assumptions about the natural environment that characterize Financial Bottom Line (FBL), Triple Bottom Line (TBL), and Social and Ecological Thought (SET) management, and consider their differing approaches to managing ecological well-being. In doing so, we describe the carbon economy, and then examine management issues regarding energy, food systems, and human health.

Four Keys to Managing Ecological Well-Being: Approaches, Energy, Food Systems, and Health

Ecological well-being *is evident when the Earth's natural systems are functioning in a way that sustains and enhances the flourishing of human life.* Just as the health of human beings depends on the proper functioning of various systems (e.g., the cardiovascular system, the respiratory system, the gastrointestinal system, and so on), so also the Earth has many systems that need to function well in order for the planet to sustain human life (e.g., for most of its billions of years of history, the conditions on planet Earth would not have sustained humankind).[7] And just as unhealthy behavior can create problems for our bodily systems (e.g., smoking cigarettes affects our respiratory system and can cause cancer), so also human activities can

Ecological well-being is evident when the Earth's natural systems serve to sustain and enhance the flourishing of human life.

create problems for the earth's natural systems. Humankind is already exceeding the limits of three of nine key planetary systems necessary to sustain ecological well-being.[8] Indeed, scientists are suggesting that the planet is entering a new geological epoch, called the Anthropocene, triggered by human activity particularly since 1950.[9]

As recently as a decade ago, the natural environment was rarely mentioned in management textbooks. Today ecological well-being has become a prominent concern, and it is one of the primary goals in both TBL and SET organizations. The **natural environment** *is composed of all living and non-living things that have not been created by human technology or human activity*.[10] The natural environment provides important organizational inputs (e.g., raw materials, natural resources, minerals, water, air), but it is also used as a place to dispose of organizational waste (e.g., pollution, greenhouse gas emissions, etc.).

A decade ago the natural environment was rarely mentioned in management textbooks.

Humankind has been using an increasing amount of the Earth's resources over time. This is due not only to a growing global population—from 350 million people in 1350, to one billion in 1804, to over 7.5 billion today—but also because we have been taking greater portions of resources to serve our needs and wants. The idea of an **ecological footprint**—*which refers to the amount of the earth's natural resources that are required to sustain a particular lifestyle or activity*—is becoming a popular way for managers to think about how many natural resources their organizations use.[11] Researchers can estimate how many **global hectares**—*the term used in the ecological footprint literature to measure one unit of biocapacity*—of natural resources are used by a person, an organization, or a nation. A global hectare is calculated using equivalency measures based on the planet's hectares of land for grazing crops, marine and inland fisheries, forest land (which provides timber and sequesters CO_2 from the atmosphere), and so on. Our planet is calculated to have a total of about 12 billion global hectares, or about 1.6 global hectares per person.[12]

For about 14,000 years until 1820, our average ecological footprint was between 1.2 to 1.3 global hectares per person. This increased to 1.86 hectares per person in 1950, and has stabilized around 2.70 hectares per person since 1970. During the same time, humankind's share of the planet's total ecological resources has grown from .05% 12,000 years ago, to 7.7% in 1700, to 12% in 1820, 14% in 1950, 100% in 1970, 125% in 1990, and 152% in 2008.[13] In other words, humankind is today consuming over 150% of the Earth's sustainable biocapacity. Put more simply, we are living beyond the carrying capacity of the planet. For example, we are using up nutrients in the croplands and fish in the oceans at a greater rate than they are being replenished, and we are putting CO_2 into the atmosphere at a greater rate than it can be taken out. Between 1965 and 2005, the increase in ecological footprint increased from about 4.3 to 7.8 global hectares per person in high-income countries, increased from 2.0 to 2.2 in middle-income countries, and decreased from about 1.2 to 1.0 global hectare per person in low-income countries.[14]

While efforts to become more sustainable can start at the household level, it is even more critical that the world's business organizations become more sustainable. Recall that the world's largest 3,000 corporations create US$2 trillion in negative ecological externalities every year. Along the same lines, consider that even if every household were to recycle 100% of all the goods that it uses, this would still solve only 5% of the pollution problem because more than 75% of waste in countries like the U.S. is industrial waste.[15] Ecological well-being demands looking at the organizations that produce the goods we consume; these organizations mine, transport, and transform the raw materials that become our smart phones, cars, and soda pop cans.

The largest 3,000 corporations create $2 trillion in negative ecological externalities.

APPROACHES TOWARDS ECOLOGICAL WELL-BEING

As we described in the first chapter, the three approaches to management conceive of the relationship between ecological well-being and social and financial well-being differently. FBL management considers economic activity to be separate and independent from the natural and social environment. TBL management suggests that economic activity is interdependent with the natural and social environments. And the SET approach suggests that economic activity is dependent on social and ecological well-being.

FBL approaches to ecological well-being

FBL organizations tend to use one or more of three approaches or methods to manage ecological well-being: unawareness, obstruction, or legal conformity.

Unawareness. FBL management focuses on information from the financial markets to make decisions vis a vis the natural environment. Thus, all things being equal, FBL managers source natural resources from regions that offer that lowest financial price, and build factories in countries that have the least expensive financial costs associated with pollution. In short, FBL management is unaware of, or perhaps purposely ignores, issues related to ecological well-being or the carrying capacity of the planet, except insofar as these are reflected in financial transactions.

There are two good reasons that explain why FBL management has historically not paid much attention to the ecological environment, and specifically to the negative ecological externalities associated with the production of goods and services. First, over the course of most of our history, humankind has had a miniscule effect on the planet's natural environment. Second, until recently managers have not been educated to take into account the idea of ecological well-being (e.g., many managers are unfamiliar with the carbon cycle or land use issues). This is changing with a younger generation of managers, but senior leadership is still lagging. In one international study, 67% of managers "strongly agreed" that climate change is real, but only 36% "strongly agreed" that the leadership of their firm believed climate change is real.[16]

Obstruction. Obstruction is evident when managers are aware of the negative ecological externalities created by their organizations, but work against any efforts to address them because they fear it will decrease their own, or their organization's, financial well-being. This may sometimes lead to illegal activity and doing whatever it takes to prevent knowledge of such behavior from reaching other organizational stakeholders and society at large. For example, tobacco companies have withheld data that point to the cancer-causing effects of cigarettes.[17]

Legal conformity. Legal conformity is a defensive approach used by managers who are aware of the negative ecological externalities created by their organizations, but do only what is legally required to address them (which includes paying penalties if that is less expensive than compliance). Managers adopting this approach exhibit little environmental sensitivity. They will insist that their employees behave legally, but they put the interests of shareholders first at the expense of other stakeholders and the environment. For example, Willamette Industries of Portland, Oregon, agreed to install $7.4 million worth of pollution control equipment in its 13 factories to comply with Environmental Protection Agency requirements. But the move came only after Willamette was fined $11.2 million for violating emissions standards.[18]

TBL approaches to ecological well-being

TBL management tends to exhibit one or more of the following three approaches to ecological well-being: respond to customer demand, implement financial cost efficiencies, and support self-serving legislation.

Customer demand. TBL management seeks to respond to the growing demand for ecologically-friendly products and services, recognizing that this will enhance the firm's financial performance. For example, a 2015 study shows that 72% of Millennials are willing to pay extra for goods and services from firms committed to positive ecological and social practices (up from 55% in 2014).[19] Entire industries have been created by the desire to be green, from windfarms that generate renewable energy, to Community Supported Agriculture (see opening case), to consultancies related to the Global Reporting Initiative (which works in cooperation with the UN Global Compact and helps organizations monitor and report their environmental performance).

72% of Millennials are willing to pay extra for goods and services from firms committed to positive ecological and social practices.

Unfortunately, sometimes businesses are tempted to participate in **greenwashing** *which refers to using misleading information in order to present a false image of ecological responsibility*. This has made consumers skeptical and has undermined the green movement. People seek to minimize greenwashing via websites like Greenwashing Index to rate different products, and by establishing industry-specific third-party organizations to accredit whether a product is ecologically-friendly (e.g., the Marine Stewardship Council).[20]

Relying on customer demand to drive ecological sustainability can be troublesome because customer demand is sometimes fickle. For example, whenever gasoline prices go up due to an oil crisis, automobile manufacturers increase their emphasis on fuel-efficient cars. However, when the prices decline and the market appears ready for bigger and less fuel-efficient cars, then the auto industry is quick to invest marketing and production dollars in less environmentally-friendly cars and SUV's. The market gets what it wants, even when this does not promote ecological well-being.

Efficiency. TBL management supports building business cases that show how reducing negative ecological externalities can lower an organization's financial costs via, for example, reducing packaging for goods, using LED lighting, and choosing more energy-efficient transportation options for the flow of goods. Advanced tools have been developed, such as **life-cycle assessment (LCA),** *to identify areas where there could be ecological benefits and financial savings in the overall process of how an organization sources raw materials, transforms them into new products, sells them to customers, and how they are used, maintained and disposed of by consumers*. LCA often embraces **cradle-to-cradle design**, *which seeks to ensure that the material content of products at the end of their useful life can be re-used to make new products, and that new products are made from expired products* (thereby reducing the new raw materials a firm needs to use). For example, Interface Inc. is using tools like LCA to reduce its net ecological footprint to zero (see opening case, chapter 14; see also chapter 19).

Stricter legislation. Sometimes it is in the interests of a TBL firm to support stricter government legislation related to green practices, such as when a firm has developed green technologies that are better than its competitors', or when a firm is in danger of losing its reputation internationally due to environmentally-unfriendly practices in its domestic market. For example, early on in the Trump administration, many Fortune 100 companies took out advertisements to encourage the U.S. government to remain committed to the Paris Climate Accord, even promoting carbon taxes, which would create a level playing field and encourage the development of greener technologies.[21] The idea behind green taxes[22] is relatively simple: increase taxes on things that degrade the environment (e.g., energy sources that emit carbon into the environment), and reduce taxes on other things that you want to encourage (e.g., by reducing payroll taxes to help increase employment). Such green taxes could be phased in over a period of fifteen or more years to allow for a smooth transition. Green taxes can pay for health-related and clean-up costs associated with pollution, thereby ensuring that people pay for the damage they cause by environmentally-unfriendly activities.[23] Some critics argue that governments who promote green taxes undermine the international competitiveness of their businesses, but proponents respond by noting that green taxes can stimulate the development of environmental-friendly technologies that will be in demand in the future. Countries like Denmark, Sweden, the Netherlands, Britain, and Germany have been leaders in implementing green taxes.

SET approaches to ecological well-being

SET management promotes more proactive, stakeholder-centric and/or place-based approaches to enhancing ecological well-being.

Proactiveness. A proactive approach is evident when, without being prompted by a stakeholder or a business case to do so, managers take the initiative to seek opportunities to enhance the natural environment. These managers go out of their way to initiate contact with and learn about the needs of different stakeholder groups, and are willing to use organizational resources to promote the interests of the community and the environment. For example, the presidents from some of the most prestigious American universities have pledged to make their campuses carbon neutral: "We're saying that sustainability is no longer an elective."[24]

Stakeholder-centrism. A stakeholder-centric approach takes into account customer demand, but in addition also listens to other stakeholders, such as neighbors, business partners, and special interest groups. This approach acknowledges the need to make ecological choices that are reasonable in the eyes of the larger society, without requiring a business case to do so. This is evident when businesses install extra equipment to minimize noise or chemical pollution, not because it is profitable or they are legally required to so, but simply because it is respectful of their community.

Place-based organizing. For most of its history, humankind has lived in agrarian or hunter-gatherer societies. Today many of us live in concrete jungles, and have few reminders of the beauty and harshness of the natural environment. This disconnectedness from place is celebrated and captured in the FBL idea of a "flat world," where technological advances are said to make geographical and regional differences irrelevant.[25] Unfortunately, our disregard for place has coincided with a rise in negative ecological externalities. To counteract this, SET management promotes **place-based organizing** (PBO) *which is evident when an organization's ownership, productive activities, and resources are grounded in a specific geographic location.*[26] PBO not only enhances ecological well-being, it also has locally-beneficial social and economic outcomes (see also Chapter 3).

Place-Based Organizing *(PBO) enhances ecological well-being, and has locally-beneficial social and economic outcomes.*

In terms of enhancing positive ecological externalities, PBO increases the likelihood that an organization's members will care about and care for ecological well-being (rather than merely exploiting natural resources), become mindful of the integral connections between ecological well-being and the organization's socio-economic well-being, and put relatively more emphasis on socio-ecological value creation than on maximizing financial well-being.[27] For example, organic agricultural practices, such as evident in place-based organizations like CSA's (see opening case), provide ten to fifty times more benefits to ecological well-being (e.g., improve health of soil, remove carbon from atmosphere) than industrial agriculture.[28] PBO also creates positive social externalities by enhancing community, social capital, philanthropy and participation in local politics.[29] Finally, people who are attuned to "place" are kinder, less stressed, and have greater overall well-being[30] (e.g., research on forest therapy points to physiological and psychological benefits to taking walks in a forest vs an urban setting[31]).

People attuned to "place" are kinder, less stressed, and have greater overall well-being.

In terms of reducing negative ecological externalities, PBO reduces the outsourcing of pollution from rich to poor countries where environmental standards are lower and/or are not enforced.[32] PBO can also reduce negative externalities associated with long-distance transportation of goods.[33] With regard to PBO reducing negative social externalities, when consumers purchase goods produced at a local factory, where they are more likely to personally know workers, it is less likely to have exploitive/sweat shop working conditions. Examples of PBO include CSA's, farmers' markets that sell local produce and handcrafts, and businesses like the Tall Grass Prairie Bakery that offers organic breads made from locally-grown and milled grains.

ENERGY AND THE CARBON ECONOMY

In order to think effectively about ecological well-being, managers must have at least a rudimentary understanding of the carbon economy.[34] *Carbon has been ca*lled "the currency of life"[35] because of its role in providing energy to plants and animals in the food web.[36] This is part of the carbon cycle, which in simple terms describes how carbon moves back and forth between humans and other animals, the atmosphere, plants and other parts of the environment. To understand its importance, it is helpful to use a metaphor that compares carbon to a rechargeable battery, where the amount of energy a carbon atom has depends on the configuration and number of electrons that orbit its nucleus when it combines with other elements. For example, the carbon found in a sugar molecule ($C_6H_{12}O_6$) is like a fully charged battery. When we consume that sugar, and add oxygen from the air we breathe, then the energy stored in the carbon is released (in the form of adenosine triphosphate, called ATP) and we get H_2O and CO_2, which can be depicted as follows:[37]

$C_6H_{12}O_6$ (sugar) + O_2 (oxygen) → ATP (Usable Energy) + H_2O (water) + CO_2

Returning to our metaphor, the carbon in CO_2 is like a discharged battery, and in order to recharge it you need to place it into a battery charger and plug it into a source of electricity. In the case of CO_2, the recharging process is called photosynthesis, where plants are akin to battery chargers and the sun is like the energy source.

Energy from the sun + CO_2 + H_2O → $C_6H_{12}O_6$ + O_2

In terms of our metaphor, the carbon cycle points to the cyclical processes at work in charging and discharging the energy in carbon. Humankind's output (carbon in **CO_2**) becomes an input for plants, and then via photosynthesis the plants' output (e.g., the re-charged carbon found in the $C_6H_{12}O_6$ of fruits and vegetables) becomes our input. This mutually beneficial carbon cycle has worked well for millennia.

Moreover, other sources of carbon have played a central role in providing energy that has enabled the development of civilization as we know it. This started with the advent of fire—that is, releasing the energy of carbon stored in wood—which improved the efficiency of how we prepared food.

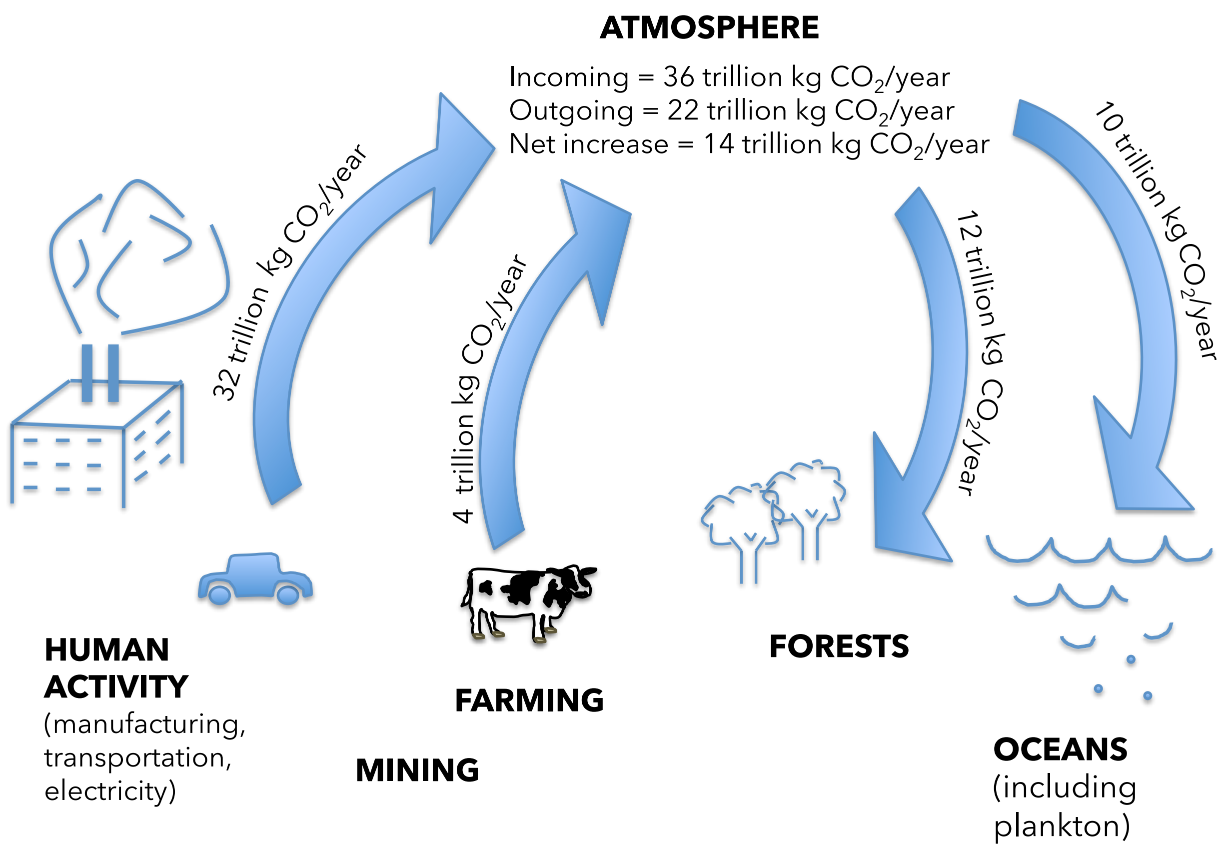
A major shift started about 12,000 years ago, with the transition from hunting and gathering to agriculture. In order to grow crops on the same land season after season, the plants need resources from the soil. This is where carbon comes in; it is estimated that as much as 50% to 70% of the carbon in cultivated soils has been lost over time,[38] thanks to practices like repeatedly plowing the soil, which releases carbon into the atmosphere at the rate of about one tonne of carbon per hectare plowed.[39] Over the past 10,000 years the planet has lost about 16% of the total amount of carbon in the Earth's soil. This amounts to 240 trillion kilograms, which is about one-third of the total of the 750 to 800 trillion kilograms of carbon stored in the atmosphere today.[40] Until about 1950, more carbon was entering the atmosphere due to changes in land use (e.g., soil degradation, deforestation) than due to the burning of fossil fuels.[41] However, since 1950 emissions due to the burning of fossil fuels have doubled, while emissions due to changes in land use have stabilized.[42]

Another major shift occurred when humankind began to master the ability to use fossil fuels to power machinery and usher in the Industrial Revolution. Carbon is the central element in the coal, oil, and natural gas that—when combined with oxygen (and a spark)—produces the energy we use to power our vehicles, heat our homes, and run our electronic gadgets and machinery. Returning to our metaphor, fossil fuels are like charged carbon batteries that have been deposited in the ground during millions of years of pre-human history. Crude oil is about 85% carbon by weight. One barrel of oil (about 159 litres and 135 kg) has about 6 billion joules of energy (about 1.43 billion calories), which is the equivalent energy of a human working 12 hours/day, 365 days/year, for 3.8 years (a healthy person on a treadmill or bike can put out enough energy to light a 100-watt bulb for an hour, which is about 360,000 joules per hour). The average North American uses about 23 barrels of oil per year, the equivalent of having 89 virtual slaves working 12 hours/ day 365 days/year.[43] In the same way, one cup of gasoline has the equivalent energy of about 50 hours of slave-like labor. It is little wonder that carbon-based energy has contributed so dramatically to the development of civilization as we know it.[44]

One cup of gasoline has the equivalent energy of about 50 hours of slave-like labor.

Unfortunately, our use of fossil fuels is adding more CO_2 (discharged carbon) into the atmosphere than photosynthesis and other Earth systems can remove. On average, burning a barrel of oil emits about 430 kg of CO_2 emissions[45] (a cup of gasoline emits over 0.5 kg).[46] Overall, each year there is a net gain of about 14 trillion kg of CO_2 in the Earth's atmosphere. As depicted in Figure 4.1, much of this is due to fossil fuels and industry, which adds 32 trillion kg of CO_2 to the atmosphere each year (prior to 1950, fossil fuel emissions added "only" 5 trillion kg of CO_2 per year, but by 1990 it was 22 trillion kg of CO_2).[47] Land use changes like deforestation are adding another 4 trillion kg of CO_2 annually. Of these annual emissions of 38 trillion kg of CO_2, plants are able to remove about 12 trillion kg of CO_2 (e.g., via photosynthesis) and oceans remove another 10 trillion kg of CO_2 (mostly thanks to plankton), resulting in the net addition of 14 trillion kg of CO_2 per year.[48] As a result of the net increase, atmospheric CO_2 levels have risen from 280 parts per million to 400 parts per million, whereas 350 parts per million is considered sustainable (our planet's atmospheric CO_2 had not been greater than 300 parts per million for the 650,000 years prior to 1950).[49] On an encouraging note, humankind's energy-related CO_2 emissions have now stabilized (at about 32 trillion kg per year) for the past three years, while global economic growth has been about 9% during that time.[50]

Figure 4.1: Simple depiction of carbon cycle



Most scientists believe that the increase in carbon in the atmosphere contributes to climate change via a process called the greenhouse effect. A greenhouse becomes warmer thanks to its roof and walls being made out of a thin layer of clear plastic or glass that allows the sun's rays to come into the greenhouse, but that thin layer also makes it difficult for the heat inside to escape. In the same way, the additional **CO_2** in the atmosphere permits the sun's rays to heat the Earth but makes it more difficult for that heat to escape.

Scientists generally agree that climate change is real (the 10 warmest years since 1880 have occurred in the last 15 years), and that it is caused by higher greenhouse gases (GHG) like CO_2 in the atmosphere which have been added by the activities of humankind.[51] Climate change creates all sorts of problems, such as the melting of polar ice caps (about 100 cubic miles of ice melted between 2002-07; between 1980 and 2017 the total size of the polar ice caps decreased by about 25%, going from 21 million to 16 square km[52]), which in turn is increasing water levels (sea level increased about 1.7 mm per year from 1870-1994, and has been increasing about 3.2 mm per year from 1995-2013). Of the world's 20 mega-cities, 15 are vulnerable to rising sea levels and coastal storm surges.[53]

Another negative externality associated with more CO_2 in the atmosphere is that more of it is being absorbed into the oceans, which reduces the pH of the ocean and causes acidification,[54] as follows:

CO_2 (from atmosphere) + H_2O (from ocean) → H_2CO_3 (carbonic acid)

The acidity of ocean surface water has increased about 30% since the Industrial Revolution. While the ocean's absorption of CO_2 may slow down climate change in the short run, unfortunately it may compromise the resilience of plankton and its ability to remove carbon in the long-run. This may not seem like a big worry, but plankton provide half the food eaten by marine animals and removes a large percentage of the carbon from the atmosphere.[55]

The FBL approach to energy and the carbon economy

Proponents of FBL management correctly note that scientists cannot unequivocally prove that the additional CO_2 in the atmosphere causes climate change which will usher in the Anthropocene era and threaten the earth's systems that support human life as we know it. They are also correct to point out that there have been similar fluctuations in temperature in the Earth's distant past. The planet's systems are very complex and seem to be very adaptable to change. For FBL managers who make these points, it makes sense to keep using fossil fuels as the source of energy that drives our economy because it is the least expensive way (at least in the short-term) to generate high organizational profitability. The FBL approach involves little concern about climate change, and often obstructs or minimizes standards which are designed to curb the use of fossil fuels, and follows only the minimum legal standards.

The TBL approach to energy and the carbon economy

TBL managers seek to develop new products and services that address consumer concerns about protecting the environment. For example, given that 31% of GHG emissions in the U.S. come from automobiles,[56] TBL firms like Tesla have developed electric cars that produce zero CO_2 emissions when they are driven. However, the electricity that powers electric cars is often created using fossil fuels, and the manufacture and disposal of batteries in electric cars emit more toxicity than cars with an internal combustion engine. A recent life cycle assessment—which takes into account the manufacture, use, and disposal of cars—found that the Global Warming Potential of electric cars is about 67% of internal combustion engine cars (.115 versus .170 kg CO_2 equivalent/km driven), but the Human Toxicity Potential of electric cars is about 75% greater (.075 versus .042 DCB equivalent/km driven).[57]

The Global Warming Potential of electric cars is 67% that of internal combustion engine cars, but the Human Toxicity Potential of electric cars is 75% greater.

Some firms sell carbon offsets to allow consumers a different way to address the CO_2 they put into the atmosphere. Thus, rather than reducing their use of fossil fuels, consumers can pay someone to plant trees that will take the CO_2 they emit out of the atmosphere. For example, at Terrapass carbon offsets cost US$5.95 for 1,000 pounds of carbon,[58] so it would cost about $60 per year to offset the carbon emissions of a typical car in a year.[59] A 25-year old maple tree absorbs about 3 pounds of CO_2 per year, while a 25-year old white pine absorbs about 14 pounds per year.[60] The average compact car emits just over 0.5 pounds of CO_2 per mile (the average SUV is double that).[61] To absorb the CO_2 from a typical car in a year takes about 3,333 maple trees or 700 pine trees.

In terms of increased eco-efficiency, Ford expects a 72% decrease in its use of water to manufacture cars by the year 2020 without harming its financial bottom-line.[62] TBL firms like Walmart are rightly praised for converting their transportation systems to electric, reducing energy consumption via LED lighting, and reducing heating and cooling costs via improved building standards. For example, Elizabeth Sturcken, managing director of the Environmental Defense Fund+Business considers Walmart to be the leading retail company for sustainability and praises the company for seeking to reduce GHG emissions by 18% for 2025.[63] However, others point to Walmart's remaining negative externalities (it will still be emitting 82% of its GHG emissions in 2025) and wonder how much of its efforts to be environmentally responsible are greenwashing.[64]

Finally, many TBL firms support new taxes and stricter legislation that support non-carbon energy, recognizing that this might boost subsequent business opportunities in green innovation.[65] TBL management is particularly interested in developing new technologies that address consumer demands and create ecologically-friendly efficiencies. This includes investment in non-fossil fuel-based technologies like wind turbines and solar power panels. Other more future-oriented technologies to remove carbon from the atmosphere include: shooting dust into the upper atmosphere to scatter sunlight away from the earth; reflecting sunlight away from earth by sending a fleet of 55,000 mirrors into space; and pumping liquid carbon dioxide deep into the oceans.[66]

The SET approach to energy and the carbon economy

SET managers take a more radical approach to ecological well-being. First, SET management promotes a proactive change, illustrated by the provision of bikes and car-sharing services in cities like Copenhagen, Denmark, where young adults exert peer pressure on others to not purchase a car. In contrast, consider the fact that about half of all Americans live within 8 kilometers of their work, yet only 10% walk or use a bike or public transit (versus 50% in Europe).[67] Driving in the U.S. produces an average of 11 kilograms of CO_2 per person per day, and the manufacture of cars produces about one-third of their total environmental damage (manufacturing one car creates about 26 tonnes of waste and 900 million cubic meters of polluted air). When all the time associated with owning a car is taken into account (i.e., the hours we spend working to pay for the car, to maintain it, to drive it, and so on), and compared to the total distance we drive, then our average travel speed is about 8 km/hour (the pace of a brisk walk). Perhaps the time has come to invest in bikes and pedal-powered cars such as velomobiles (the current land speed record for a pedal-powered car is about 130 km/hour, and an average cyclist can easily maintain a speed of 30 km/hour). Maybe many of us should be driving two-seater pedal-powered cars such as the Elf, which can be boosted by a small electric motor; it is manufactured by Organic Transit.[68] While cycling may be less convenient than driving, it enhances positive externalities (e.g., improved personal fitness and health) and reduces negative externalities (e.g., lower GHG emissions, lower health care costs).

When we take into account all the time associated with owning a car, and compare it to the total distance we drive, then our average travel speed is about 8 km/hour (5 mph).

Second, SET managers listen to and empower a wider variety of stakeholders, in some cases ensuring that the natural environment itself is given a symbolic seat at the decision-making table. The merits of this approach may be more observable in organizations that operate in countries like Norway, where environmental rights are entrenched in its constitution. Organizations operating according to stricter environmental protection and performance standards tend to have smaller ecological footprints. For example, Norway has reduced its air pollution ten times more quickly than countries like Canada.[69]

Finally, SET management promotes a more place-based and less consumeristic lifestyle. Instead of assuming that more stuff is better, it assumes that having enough stuff is better, and it promotes businesses and industries aligned with a simpler lifestyle. For example, consider the emerging slow fashion movement. Recall that Americans purchase nearly 20 billion garments each year (about 68 garments and 7 pairs of shoes per person), of which 98% are imported (vs. 50% in 1990). What if Americans purchased only 7 billion garments per year, with each costing three times as much, but 98% were locally-made? Think of the reductions in negative externalities associated with transportation and poor overseas working conditions, and think of the benefits to the local economy via the local multiplier effect.[70] (But also think of the jobs that overseas workers would lose, and the reduced choice of products that would face domestic consumers.) SET management is consistent with clothing stores that source at least 90% of the products they sell from within 100 miles of their location, and support sustainable practices. Such stores support local designers and manufacturers who focus on local needs and aesthetics. Aspects of this approach are already evident in places like Toronto, in companies like Skinny Sweats.[71] Local garments can be made from recycled or natural fabrics (e.g., locally grown hemp), and focus on "slow fashion"—that is, high quality products that are designed to last, to be timeless, and amenable to mixing and matching—rather than "fast fashion" (aka "throw-away"). The sticker price on slow fashion products would likely be higher, but the hidden price would be much lower.[72] Products would have a longer useful life, and garment workers would be paid a living wage.[73]

MANAGEMENT AND FOOD SYSTEMS

Food systems are essential for humans to survive and to flourish, and farms have long been (and still are) by far the most common type of organization on the planet. Presently the world has about 500 million small-scale farms (smaller than 2 hectares/5 acres), which involve about 2.7 billion people.[74] Food systems are important for our physical well-being, and also have a large effect on the planet's ecological well-being.

Humankind has taken over many of the planet's natural resources for its own purposes, including to feed itself. We now use about 25% of the Earth's total net primary production of natural vegetation, double what we used a century ago.[75] For much of this we can thank industrial agriculture, with its emphasis on technologies like large-scale operations and machinery, plant breeding, fertilizers, and pesticides.[76] Although modern industrial agriculture seems to be very efficient—for example, in Canada and the U.S. only about 3% of the population is involved in growing food—it has actually become increasingly energy-inefficient because of its heavy reliance on carbon-based inputs (e.g., fertilizers need to be mined, transported, and applied with machinery). In pre-industrial Wiltshire, England, the ratio between energy inputs and energy outputs in agriculture was about 1:14 (that is, 1 calorie of manual labor plus animal energy inputs yielded 14 calories of food energy outputs), but by 1971 that ratio was 1:2.1,[77] and today the overall average for industrial agriculture is at best 1:1,[78] and often times 7:1 or 10:1.[79] In short, a lot of calories (much of it fossil fuel energy) are embedded in the machinery and inputs like fertilizer that enable industrial agriculture to be so productive. Meanwhile, the average ratio in agrarian societies is 1:5 or better, making them much more energy efficient.[80]

Earth has about 3.2 billion hectares of arable land, of which only 1.3 billion are moderately or highly productive; the remaining 1.9 billion hectares serve as permanent pasture, forest, or woodland.[81] Standard agriculture practices deplete the carbon and nutrients in the soil so that, for example, the planet may have irreversibly lost more productive land over the past 10,000 years than is currently under agriculture production.[82] The three biggest crops in the world—corn, wheat, and rice—together use about 540 million hectares of land[83] and represent about half of all the calories humankind consumes worldwide.[84] Corn:

• is native to central America ("maize" means "sacred mother" or "giver of life").

• is about 45% carbon and is found in hundreds of foods, especially as sweeteners (perhaps 50% of the carbon in our body comes from corn).[85]

• uses far more fertilizers, herbicides, and insecticides than any other crop in the U.S., making corn the country's largest contributor to water pollution.[86] The negative externalities associated with nitrogen fertilizers used to grow corn are greater than the total market value of the corn produced for grain ($75 billion).[87] An additional $70 billion of negative externalities are related to U.S. healthcare costs related to high fructose corn syrup.[88]

• is used for producing ethanol, even though the process of growing and producing corn ethanol uses up almost as much energy as the ethanol produces.[89]

In addition to using much of the Earth's plant life, humankind is also dominating the animal kingdom. Today, Earth is home to about 19 billion chickens, 1.4 billion cattle, 1 billion sheep, and 1 billion pigs.[90] This leaves fewer natural resources and less room for other animals; for example, between 1970 and 2012 the world's wildlife populations declined by an average of 58%.[91] Cattle and sheep are important to the food system because they are ruminants, which means that they can eat grass and convert it into food (meat) for humankind. Grasses cover about 70% of the world's total land surface, and cattle and sheep can improve the quality of the soil (with their manure, by aerating the soil with their hooves, and by eating the grass on the surface while permitting deep-rooted grass to sequester carbon from the atmosphere).[92] However, most cattle in the U.S. find their way to Concentrated Agricultural Feeding Operations (CAFOs), where an average cow consumes about 800 kg of corn (about 50 bushels) before it is slaughtered. One study found that 93% of the tissue in a typical hamburger patty is derived from corn.[93] In the U.S. alone, about 3.5

Earth is home to:
19 billion chickens,
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million hectares (35,000 square kilometers) of land planted in corn are required to feed all the cattle.

Ruminants also produce methane gas (CH_4), and account for almost half of all the GHG emissions caused by agricultural production (agriculture emits slightly more global GHG emissions than transportation).[94] It has been estimated that one cow produces about as much GHG per year as driving a car, and that one kilogram of beef is the equivalent to driving about 250 kilometers (by way of comparison, a kilogram of lamb = driving 125 km, pork = 45 km, and chicken = 33 km).[95] Another study estimates that the $250 billion American beef industry creates $412.5 billion in negative externalities (i.e., $1.00 of revenue in this industry creates $1.65 in negative externalities).[96]

75% of the world's food comes from 5 species of animals and 12 plants.

Perhaps the greatest danger modern agricultural poses to the planet's ecological well-being is in the loss of biodiversity, which is approaching rates associated with the planet's previous mass extinctions, lending support to the argument that we are entering the Anthropocene era.[97] Today about 75% of the world's food comes from 5 species of animals and 12 plants. This increase in monoculture demands large volumes of external inputs[98] that further negatively impact wildlife.[99] Just as the human body is a complex series of diverse interrelated biological systems, organs, and microorganisms that need to work together in harmony to facilitate our well-being, so also the earth's systems and subsystems require biodiversity to remain resilient and allow humankind to flourish.[100]

The decline in biodiversity is partly attributable to the concentration of corporate power in industrial agriculture, which decreases variety.[101] For example, 65% of all agricultural land is farmed by the largest 1% of farms (larger than 50 hectares), with mid-size farms (3-49 hectares, 15% of all farms) using another 23% of the land.[102] The largest seed producer (Monsanto) controls 35% of the market, with the next 6 largest firms controlling another 30%. The largest fertilizer producer (Mosaic) controls 40% of that market, with the next seven largest competitors controlling another 25%. The four largest pesticide producers control 50% of the global market.[103] There are similar concentrations of power among the four largest firms that purchase farm products and process them into the foods we eat, and among the supermarkets and hypermarkets where consumers purchase 45% of their groceries.[104]

If all the negative ecological externalities were added to the price of food produced via industrial agriculture practices, then the price of food could easily double. This would mean, for example, that on average food would represent 20% of the net income of an American, rather than the current 10%.[105] However, even at 20%, this is much lower than it is for most of the world. Adding ecological externalities to the price of food would encourage everyone to rethink common practices in the entire food system. For example, suppose low-input sustainable agronomic practices grow 25% less food per hectare than industrial agriculture, but they reduce negative externalities by more than 50% (e.g., recall that industrial agriculture is relatively energy-inefficient and contributes at least ten times less to the soil and ecosystems). In this case, a business case would favor organic rather than industrial agriculture.

Moreover, doubling food prices might help to solve another serious problem associated with the food system: food waste. The world produces about 4,600 calories of food per person per day, about half of which are wasted (e.g., perhaps because it is not harvested properly, it is disfigured, or because of lack of adequate storage facilities or damage during transport). In countries like the U.S., Canada, Australia, and New Zealand, about 25% of the food that people purchase and take home from grocery stores is wasted (e.g., thrown out due to spoilage, leftovers), and another 15% is wasted between the farm and grocery store.[106] An estimated 8% of the world's GHG emissions come from food loss and waste production.[107] A 30% reduction of food waste at the consumer level could reduce the need for 100 million acres of cropland by the year 2030.[108] Maybe if people paid the real price for food, they would be less inclined to waste it. Maybe we could change incentive structures for businesses that currently profit from consumers who throw out food and thus purchase more.

FBL management and food systems

FBL management has little concern for the negative ecological externalities associated with producing and transporting food, and often seeks to hide them from view. For example, it is not unusual for agribusinesses that run Concentrated Agricultural Feeding Operations (CAFOs)—85% of U.S. meat is controlled by just four businesses—to bar journalists and documentary producers from coming to their CAFO and showing the general public what goes on inside.[109] CAFOs have been associated with air and water pollution, improper care for animals, and high energy use.[110] FBL organizations argue that it is the responsibility of government agencies to regulate food systems, and conventional large agribusinesses support and benefit from regulations that provide them with relative competitive advantages.[111] For example, new laws in the U.S. will require each farm to have each crop individually-certified to comply with food safety regulations. This creates a strong financial disincentive for small farms to plant a variety of crops (even though planting a variety of crops is a healthy agronomic practice).[112]

TBL management and food systems

TBL management is sensitive to the increasing consumer demand for foods that are perceived to be more ecologically responsible or healthier. For example, in the 1980s "grassfed beef" was considered a second-rate, low-cost alternative to "corn-fed beef" (which is a fattier and tastier beef), but within 15 years an active consumer movement coupled with enterprising entrepreneurs had transformed grassfed beef into a product that demanded a premium price.[113] Today the organic food industry is worth about $40 billion per year in the U.S.[114] Grocers like Whole Foods have become successful thanks to their early-mover advantage in offering the sorts of products that environmentally-aware consumers are demanding. More recently, giant grocers like Walmart and Costco have adapted to the market and become leaders in selling organic produce.

The TBL approach encourages efficiency where firms in the industry reduce food waste by, for example, training staff, measuring waste, changing packaging, and improving the management of inventory. Most firms save $14 for every dollar they invest in such initiatives.[115] Similarly, for every dollar invested to educate consumers about food waste, the household saves $84.[116]

TBL agribusinesses support the kinds of regulations that provide them with relative competitive advantages. For example, the Organic Foods Production Act (OFPA) created a national standard to certify organic food. When the Act was under consideration, there was a struggle between small-scale place-based producers and large multinational corporations (MNCs). MNCs, who see this as yet another market to develop and conquer, lobby for standards that permit the inclusion of synthetic ingredients into what is labeled organic.[117] Such regulations favor large-scale monocultural producers, and often create competitive disadvantages for small-scale polycultural farms who practice a less synthetic approach to organic agriculture.

SET management and food systems

SET management encourages the proactive adoption of practices that enhance ecological well-being because this is the right thing to do, even if there is not yet a demand for it. This includes farmers like Dan and Wilma Wiens who offered organically grown vegetables before consumers at their farmers' market were asking for it, and cattle farmers who were raising grassfed beef because it was good for the land.[118]

In addition, SET management also encourages working alongside cutting-edge ecologically-minded stakeholders. With its emphasis on PBO, a SET approach is particularly attuned to **locavores**, *which refers to people "whose diet consists only or principally of locally grown or produced food"* (the 2007 Oxford American Dictionary's Word of the Year).[119] This is in contrast to FBL and TBL food systems in places like the U.S., where the average forkful of food has travelled over 1,500 kilometers. The SET approach is particularly attuned to organic locavores. Recall that place-based organic agricultural practices create positive ecological externalities (between $460 and $5,240 per hectare) that are about 30 times greater than practices associated with industrial agriculture ($50 to $124 per hectare).[120]

In the USA, the average forkful of food has traveled 1,500 kilometers.

There is a difference in consuming organic carrots or grassfed beef that were grown at a locally-owned farm, rather than imported from a large-scale agricultural operation that is 1,500 kilometers away. Not only do the carrots travel less far, but there is a difference in the transaction of purchasing/selling the food when it is grown/consumed by someone from your own community. The food is no longer a mere commodity; it is imbued with a sense of connectedness to place and people.

A SET approach is evident in the fast-growing Slow Food movement that presents a clear alternative to conventional FBL and TBL industrial agriculture approaches to processed and fast food.[121] Slow Food supports local organically grown food where producers earn a fair price for the fruits of their labor. Again, food is more than merely a commodity; its production and consumption are intrinsically related to ecological and social well-being.[122] Slow Food promotes food that is grown using ecologically-sound agronomic practices that promote biodiversity and is consumed in healthier (less processed) forms in fellowship with others.[123]

MANAGEMENT AND PHYSICAL HEALTH

Human physical health is a third key component of ecological well-being. With some exceptions, the average life and health of humankind has been increasing over the millennia. One notable exception was the advent of the first agricultural revolution about 12,000 years ago, which was associated with a period of decreased nutrition, stunted growth, and weakened bones as humankind's nutrient diversity declined, especially among agricultural societies versus hunter/gatherers.[124] However, after a while overall health improved thanks to advantages brought by the physical security associated with settled living achieved by agriculture.[125] A second notable exception was the advent of the Industrial Revolution in Britain, which was initially associated with decreased human health, life, and survival, especially in industrial cities versus the surrounding countryside. [126] Health eventually improved thanks to improved yields in agriculture, transport and storage,[127] and discoveries in the medical sciences.

Despite continued improvements in health care and pharmaceuticals up to the present time, there are signs that negative externalities associated with our modern lifestyles may be starting to catch up with us, especially since the 1950s and the start of the Anthropocene. [128] For example, obesity is now a bigger global health crisis than hunger,[129] partly because people are less physically active than they have been in the past, and because businesses seek to maximize sales by offering tasty food, even if it is often calorie-rich and not particularly healthy. Obesity costs the U.S. about $660 billion a year, and diabetes and cardiovascular disease cost another $545 billion.[130]

The increased use of fossil fuels since the 1950s has contributed not only to concerns about climate change, but also to concerns about its negative effects on health. Reducing the use of fossil fuels would decrease emissions of nitrogen oxides, sulfur dioxide, ammonia, and other volatile organic compounds that have serious negative effects on human health. Over 90% of the world lives in places that do not meet the air quality guidelines of the World Health Organization, and about one of every eight deaths around the world are a result of air pollution.[131] Asthma and allergy rates

Halving the use of fossil fuels (and using costlier renewable energy instead) would have the net effect of saving Canadians $10 billion.

have more than doubled in the U.S. over the past decades, so that today almost 10% of children have allergies.[132] If we could reduce fossil fuel use by half, we could reduce negative externalities by as much as US$1.2 trillion per year and up to $4.2 trillion by 2030, much of which would be thanks to reduced air pollution. The money saved would be more than enough to increase by fifteenfold the availability of renewable sources of energy.[133] For example, it would cost Canadians about $5 billion if they were to reduce by half their use of fossil fuels and replace them with more expensive renewable energy. However, Canadians would save about $15 billion by doing so, thanks to reduced negative externalities (especially costs associated with pollution).[134] Thus, halving the use of fossil fuels would have the net effect of saving Canadians about $10 billion (but, because of the way GDP is calculated, halving the use of fossil fuels would decrease Canada's GDP by $10 billion).

FBL management and physical health

From an FBL perspective, the responsibility of business is to maximize profits, and it is the responsibility of government and other stakeholders with the necessary expertise to pass and enforce legislation that ensures human health and ecological well-being. Thus, FBL organizations tend to ignore (non-legislated) health related issues, unless dong so hurts an organization's financial bottom line. And the costs can be significant, as illustrated by the fact that 2.3 million people around the world die each year from work-related injuries, illnesses, and accidents.[135] Moreover, an FBL approach encourages businesses to pursue profitable activities, even if there are known significant health problems. For example, even though smoking cigarettes is known to cause cancer, the FBL approach encourages selling cigarettes if doing so is profitable for a firm and within the law. Consistent with this, cigarette manufacturers have been profitably selling their addictive products, even though they cause 3 of 10 cancer deaths in the U.S.[136] Cigarette manufacturers have been accused of obstructing the ability of consumers and others to access research that demonstrates the extent of tobacco's harm to human health.[137]

Another example comes from the food industry, where research suggests that the pesticide chlorpyrifos causes brain damage, and scientists at the U.S. Environmental Protection Agency concluded that it should be banned. However, lawyers representing pesticide manufacturers like Dow have lobbied federal agencies to ignore the science that shows the negative effects of chlorpyrifos,[138] and today it remains in wide use on crops such as strawberries, oranges, apples and broccoli.

TBL management and physical health

TBL management responds to consumer interests to enhance physical health where it can profitably do so. For example, McDonald's knows that younger customers want healthier food options with fresh ingredients, and has pledged to remove by 2018 antibiotics from its chicken products that are important to medicine used by humans.[139]

McDonald's has also been working to develop (self-serving) standards regarding what is sustainable beef.[140] Finally, McDonald's has been lauded for reducing GHG emissions and pollution when it changed the dimpling pattern on its napkins. This meant that it could fit 25% more napkins in a box, and that helps to reduce resources to manufacture boxes and transportation costs and fossil fuel emissions.[141] However, the highly processed foods that McDonald's serves have been linked to obesity and diabetes.[142] There are also many negative externalities related to the industrial beef industry, including its reliance on antibiotics and growth hormones, and the consumption of about 3.5 million hectares[143] of U.S.-grown ecologically-demanding corn.[144]

SET management and physical health

SET supports three key things people can do to improve their physical health while simultaneously enhancing ecological well-being. First, our physical well-being can be improved by becoming more active and, in particular, by using our own energy instead of carbon-based fuels to get around. This means walking or cycling to places where we might normally drive, which would reduce GHG emissions and air pollution. SET organizations facilitate active lifestyles by installing places for employees to park their bikes and take a shower, by developing and promoting products that encourage physical activity (e.g., pedal-powered velomobiles and local courier services that use bikes), and by redesigning neighborhoods and cities to include local grocery stores and trails that promote walking and cycling.

Second, our physical well-being can be improved by improving our diet.[145] This is consistent with the Slow Food movement and includes eating less processed food (especially refined sugars and fats), eating more fruits and vegetables, and eating organically-grown food in order to reduce our intake of chemicals like chlorpyrifos. Life cycle assessments show that eating more plants and less meat is healthier for our bodies and for the planet[146] (e.g., a vegan diet could reduce agriculture-based GHG emissions by 50%, and land use by 45%[147]). The SET approach also promotes the start-up of place-based organic restaurants, bakeries, and grocery stores, making it easy and convenient for people to eat healthier food.

A vegan diet could reduce agriculture-based GHG emissions by 50%, and land use by 45%.

Third, people can improve their health by avoiding illness-causing activities and stimuli. In this regard SET promotes the **precautionary principle** *that states that before anyone undertakes on action that has a reasonable risk of harming others or the environment, that person must demonstrate that the action is not harmful.* It is insufficient to engage in such actions on the basis that there is no evidence that proves them to be harmful.[148] While adoption of the precautionary principle may slow the pace of some innovation, it may encourage people to become more innovative with proven technologies. For example, from a SET perspective, chlorpyrifos should not be used. Nor, for that matter, should many other biocides, pesticides, endocrine disruptors, and heavy metals.[149] Only

1% of the 84,000 chemicals that people come into contact with every day have ever been tested. The precautionary principle is especially important in light of research that suggests that exposure to chemicals has a negative effect on children's IQ.[150] Indigenous people are leaders in modeling the precautionary principle. For example, the Iroquois Nation is known for "the seven generations rule" which requires decision-makers to take into account the effects of their decision seven generations into the future. The principle is also evident in contemporary decisions being made by American Indigenous people about sustainable energy.[151]

IMPLICATIONS FOR ENTREPRENEURSHIP

Finding inventive ways to draw resources from the natural environment to meet our needs has been a preoccupation of humankind in the hunting and gathering era, in the first agricultural revolution, and in the modern industrial era. What has changed is that we, as a species, have grown in size and technological know-how so that today we are transforming the natural environment to such an extent that we are in danger of ushering in the Anthropocene. A changing environment with increasing emphasis on ecological well-being enhances opportunities for TBL and SET entrepreneurs, but places FBL entrepreneurs at a relative disadvantage.[152] Entrepreneurs can accelerate, reduce, or reverse negative ecological externalities, depending on the decisions they make.

FBL ENTREPRENEURSHIP AND ECOLOGICAL WELL-BEING

FBL entrepreneurs feel free to use natural resources in ways that maximize financial well-being without taking negative ecological externalities into account because they see the latter as the job for governments and others. FBL intrapreneurial opportunities are evident when firms export their GHG and pollution-causing activities to overseas countries that have lower emission standards (or where standards are not enforced).[153] One estimate suggests that 100,000 people from China die each year due to pollution that comes from manufacturing goods for Europe and the U.S.[154] The FBL approach is also evident when recycling the world's electronic waste—such as old computers—is done by small-scale entrepreneurs in countries like India, which have lax enforcement and where toxic chemicals enter the atmosphere, the soil, and unprotected workers.[155]

In China about 100,000 people die each year due to pollution caused by manufacturing goods for Europe and the USA.

Perhaps the best contemporary example of FBL entrepreneurship comes from the oil sands[156] of Alberta, Canada, a country with a long history of entrepreneurs who have exploited its rich natural environment to create economic opportunities.[157] Calgary, Alberta is a veritable entrepreneurial community, with 12% of the city self-employed (the highest in the country). About two-thirds of its entrepreneurship is related to the energy industry. The entrepreneurial culture here has been described as one of "wealth creation," with 42% of entrepreneurs looking to "maximize their short-term personal profit rather than long-term sustainability."[158] In 2014, $34 billion was invested in Alberta's oil sands, which directly and indirectly helped to create 400,000 jobs.[159]

While there is a lot of money to be made, the oil sands have been called "the most destructive project on Earth" by Environmental Defense, a Canadian NGO, and "the most toxic fossil fuel on the planet" by the Sierra Club, a U.S.-based NGO.[160] The negative ecological externalities associated with extracting a barrel of oil from Alberta's bitumen (which is like a mixture of tar and sand) are higher than for other sources of oil. GHG emissions from extracting and upgrading bitumen are about 4 times higher than for conventional crude oil.[161] This has contributed to a long debate about whether pipelines should be built to connect the oil sands to the U.S. and other markets.

TBL ENTREPRENEURSHIP AND ECOLOGICAL WELL-BEING

TBL entrepreneurs seek profitable opportunities to respond to increased consumer demand for ecologically friendlier goods and services. For example, Suncor and other TBL businesses in the Alberta oil sands are working to reduce GHG emissions into the atmosphere by developing new technologies in carbon capture and storage. Other energy companies like Solar City, which is owned by Tesla, are working to reduce our dependence of GHG emitting fossil fuels.

Consider also the opportunities in the food industry, as people have become more aware of and concerned about the negative externalities of conventionally-raised meat. In 2015, about 33% of Americans reported that they were cutting back on meat.[162] Some entrepreneurs are promoting ecologically-friendlier meat alternatives, including 3D printed meat[163] and producing synthetic meat grown in a lab.[164] Pat Brown, CEO of "Impossible Foods"—which is creating meat-like products from plants—implores venture capitalists to hire scientists, "do the math," and fund more ecologically-responsible start-ups.[165] Entrepreneurs in the fast food industry have also taken notice, with vegetables becoming increasingly prominent on the menus of newer businesses like By CHLOE and Freshii, and in more established firms like Taco Bell.[166] Freshii—whose mantra is "Let's be good to the Earth"—started in 2005 and had over 300 locations worldwide by 2017. It was inspired when founder Matthew Corrin visited local "mom and pop" delis in New York City that featured fresh food.[167]

TBL entrepreneurs are adept at using messaging and marketing to profitably manage and shape markets to serve their financial interests. For example, sales of vegetable dishes in a university cafeteria increased by 25% when they were given exciting names like "dynamite beets," "sizzlin' beans," and "twisted citrus-glazed carrots."[168] Another example comes from the tobacco industry where, when cigarettes were deemed unhealthy for both smokers and for people affected by second-hand smoke, intrapreneurial cigarette manufacturers like Philip Morris introduced and promoted new "healthier" filter and low-tar cigarettes. A third example comes from the bottled beverage industry, where firms cooperate to shape public opinion in their favor.[169] Keep America Beautiful (KAB)—a TBL organization associated with the promotion of sustainability—was created in 1953 by a group of companies that produced and sold disposable beverage containers. KAB coined the term "litterbug" and worked hard to create the perception that pollution should be addressed at the consumer level, rather than by reducing the number of disposable beverage containers being manufactured and sold.

When Pepsi-Co's "Naked Juice" became the first national brand to use a plastic bottle made from 100% post-consumer recycled polyethylene—an example of intrapreneurship—it launched a program where it would donate up to 5 cents per bottle to KAB.[170] While the TBL optics are positive, we should not overlook the fact that 86% of the 60 million plastic bottles used in the U.S. *every day* end up in landfills, where they can take up to 700 years to decompose. The energy used every year to manufacture, transport, and then dispose of these plastic bottles amounts to the equivalent of about 16 million barrels of oil, which is enough fossil fuel to drive more than 100,000 cars for a year.[171]

Of the 60 million plastic bottles used in the U.S. every day, 86% end up in landfills.

SET ENTREPRENEURSHIP AND ECOLOGICAL WELL-BEING

The SET approach recognizes that if humankind is to survive as a species, we need to ensure that we respect and work within the nine planetary boundaries that define our sustainable ecological niche.[172] Among other things, this means changing the way we produce goods and services so that we remove carbon from the atmosphere and return it to the soil, rather than vice versa. This SET approach is evident in the opening case, where Dan Wiens promoted innovations like Conservation Agriculture (CA) among thousands of the world's 500 million small-scale farms. CA not only minimizes negative externalities by reducing farm inputs such as fertilizer, it also enhances ecological well-being by removing from the atmosphere one-third of a ton of carbon and adding it into each hectare of soil farmed,[173] and by providing healthier foods for consumers.[174] Small-scale farmers in low-income countries could significantly boost their overall well-being if they were paid carbon credits for using CA to sequester carbon from the atmosphere into the soil. This is the opposite of charging a carbon tax for activities that release carbon into the atmosphere.

Other examples where glimpses of SET entrepreneurship is evident include local farmers' markets, grocers like Erin Crampton (who offers shelf-space for local entrepreneurs who bring healthier food choices to her store, Crampton's Market), wind farms that provide a source of renewable energy to replace fossil fuels, and courier companies who use bikes instead of cars (thereby reducing GHG and pollution, and enhancing physical fitness of employees). SET ideas are also evident in the work of entrepreneurs who promote the use of chicken feathers to insulate homes (FeatherFill[175]), start-ups who sell products like CityTree (think of a green cube that is 4 meters wide, 3 meters tall, and 2 meters deep, filled with moss) that reduce air pollution by the same amount as 275 regular trees,[176] and entrepreneurs who are making shoes using algae that pollutes lakes.[177]

CHAPTER SUMMARY

1. As a result of economic activity and the proliferation of fossil fuel based technologies, many scientists believe that humankind is now living beyond the bio-capacity of the planet, and the Earth's systems supporting ecological well-being are in jeopardy.

2. Carbon has long been the key currency of how humans produce goods and services. Carbon provides the energy that fuels our machines, our food systems, and our bodies. Unfortunately, the carbon we use in fossil fuels and draw from agricultural soils has entered the atmosphere at rates that photosynthesis in plants and the ocean's plankton cannot keep up with, upsetting the balance in the carbon cycle that has been in place for millennia. In addition, the scale of humankind's use of plant and animal life is reducing biodiversity, which decreases planetary resilience and has created Anthropocentric extinction levels. Pollutants from fossil fuels and the consumption of profitable (but unhealthy) foods are threatening human health.

3. There are three basic approaches to managing ecological well-being:

   i) FBL managers are unaware of or deny negative ecological externalities, obstruct stakeholders who seek to monitor their ecological externalities, and meet the lowest legal standards in terms of ecological regulation.

   ii) TBL managers are responsive to consumer demand for products and services that create fewer negative ecological externalities in a profitable way, seek to use natural resources more efficiently and thus more cost-effectively, and seek regulations that are favorable to their business interests.

   iii) SET managers seek to enhance ecological well-being via proactive, stakeholder-centric, and place-based organizing.

4. A changing environment with increasing emphasis on ecological well-being enhances opportunities for TBL and SET entrepreneurship, and places FBL entrepreneurs at a relative disadvantage.

Questions for Reflection and Discussion

1. Do you think human-caused climate change is real? Do you think humankind needs to reduce its use of carbon-based fuels? Do you think we need to address negative externalities in our industrial food systems? What sort of evidence would convince you that transformational change is, or is not, needed for each of these three issues?

2. How important is it for managers to acquire a basic understanding of how the earth's ecological systems work (e.g., the carbon cycle)? Should business schools require students to take courses in environmental studies, or is it already challenging enough for management students to learn about accounting, marketing, and finance? What are the dangers of business leaders being unaware of how ecological systems work?

3. Can you imagine a lifestyle where you reduce by 50% the fossil fuels you consume by doing things like eating more organically-grown food, halving your food waste, purchasing half as many clothes as you do now, reducing by half the trips you take in a car, living in a home with half as much space per person, and so on? What would be the most difficult changes for you to make, and why? What would be the easiest changes to make, and why? Can you think of any entrepreneurial opportunities that would make such changes more compelling and easier for others?

4. Would you shop at a clothing store or restaurant that sources at least 90% of its inputs from within 100 miles of where it is located? Why or why not?

5. List the five most significant ecological challenges you think are facing humankind over the next thirty years (they need not be mentioned in this chapter). Briefly indicate the evidence you used to reach your conclusion. Then identify at least five things you could do in your career to address at least one of the challenges. How important are entrepreneurial skills to implementing your list?

6. What is the precautionary principle? Do you think it is reasonable for businesses to be bound by it? Explain your reasoning.

7. Discuss the advantages and disadvantages of place-based organizing. On balance, is it a good idea?

8. The previous chapter compared acquisitive versus sustenance economics, and documentational versus relational capitalism. Do you think that either form of economics or capitalism is more likely to improve (or worsen) ecological well-being? Explain your reasoning. What are the implications for your career?

9. Of all the ecological issues listed in this chapter, which one(s) do you feel most interested in addressing? Can you think of any entrepreneurial ideas for how they might be addressed? Develop a list of 5 ideas for a new start-up organization that addresses the ecological challenges facing humankind. Make sure at least one of your ideas is based on a SET approach.

Preview and Summary of Chapter 5

	FBL	TBL	SET
Meaning of life	Materialistic source and individualistic focus	Transcendent source and individualistic focus; materialistic source and holistic focus	Transcendent source and holistic focus
1. Meaningful work (vs depression)	Job design Consumeristic messaging	Job crafting Pro-social messaging	Healthy giving Voluntary simplicity
2. Relationships (vs loneliness)	Friendly competition Motivational skills	Work-life balance	Re-personalization Compassion Gratitude
3. Peace/Justice (vs war)	International trade Ethnocentrism	UN Global Compact Polycentrism Base of Pyramid	CRT Round Table Egalicentrism Fair Trade
Entrepreneurship implications	Work orientations influence entrepreneurial choices, and those choices have ethical implications		

CHAPTER 5: MANAGEMENT AND SOCIAL WELL-BEING: MEANINGFUL WORK, RELATIONSHIPS, & PEACE

Learning goals

After reading this chapter, you should be able to:

1. Describe the three key dimensions of social well-being: meaningful work, relationships and peace.

2. Explain how the three key dimensions of social well-being are managed in the FBL, TBL, and SET approaches.

3. Describe a framework that presents four different views of the meaning of life.

4. Explain the difference between instrumental and non-instrumental relationships.

5. Describe the three work orientations and how they influence entrepreneurship.

6. Consider the well-being implications of entrepreneurial choices.

MENTAL HEALTH AT COLLEGE

How concerned should managers be about the mental health and well-being of people in their organizations? Depression and anxiety disorders are the leading cause of sickness, absence, and long-term work incapacity in most developed countries,[1] and depression is expected to be the leading cause of work disability by 2020.[2] For example, 9% of American workers suffer from major depression in any given year.[3]

Imagine that you are a university administrator, or a professor, or a leader in a student organization, and you learn that about 20% of students in your school are diagnosably depressed, and that many others have mental health issues that remain undiagnosed.[4] So you do some research, and discover that there are five main causes that seem to contribute to poor mental health among college students, and five corresponding proven ways to address them.[5]

1. A lack of larger meaning/purpose/centering. This problem can be addressed by providing opportunities for students to think and talk about larger life questions. This involves providing opportunities to engage in meditation or mindfulness training, ensuring that courses deliberately connect their specific subject matter to such real world questions, and providing inclusive opportunities for healthy spiritual and/or religious expression on campus.

2. A lack of adequate social interaction. It can be difficult for students to leave the comforts of home and adjust to the new setting of college. Students who move away from home and live off-campus are particularly vulnerable to loneliness and depression. This can be addressed by deliberately creating spaces for social interaction, such as providing time at the beginning of each class to mingle and catch up with fellow students, developing interest and hobby-based student clubs on campus,[6] and installing buddy systems so new students have someone to reach out to.

3. Lack of physical activity. Our minds work best when we get physical exercise every day, but the motivation to exercise declines when people are in a setting where the primary rewards come from cerebral activity. This problem can be addressed by ensuring that there are convenient exercise facilities on campus, and including a gym membership in the tuition fee so that all students are encouraged to stay physically fit.

4. Other stressors. Students who are facing financial hardship or balancing school with work and other non-school responsibilities are more likely to face mental health issues. This problem can be addressed by providing bursaries and scholarships for students who need them, so that they can afford to go to school without the stress of financial issues and working many hours off-campus.

5. A lack of coping strategies. Knowing how to deal with the onset of worsening mental health is a key element in maintaining good mental health, so an obvious solution to this problem is to provide programs that help students to develop coping skills. For example, mental health improves for students who learn how to respond to the onset of stress by using breathing and muscle relaxation exercises. This also includes interventions to reduce the negative cycles that can occur when students fixate on questioning their self-worth and self-esteem.

Rather than focus on how to address causes of poor mental health, other research focuses on what people can do to improve mental health.[7] Here are things people can do to become happier:[8]

1. Deliberately pursue meaning and hope. People can do a variety of things to help them create a more meaningful life, including thinking about their goals and "life narrative." For example, over a 4-week period visualize and write about your 'ideal future life' in as much detail as possible. Feel free to write about a different topic each week or day, such as romantic life, educational attainment, hobbies, personal interests, family life, career situation, social life, community involvement, and physical/mental health. Once you've established goals, then find pathways and make plans to make them happen, enlisting the help of others as appropriate.

2. Promote positive relationship processes. Remember that everyone enjoys friendly encounters, and that many people *need* friendly encounters (e.g., likely more than 20% of your classmate are, or have been, depressed). There are a couple of simple things you can do to put this into practice. You can ask others about their interests (pay attention to their answers). Or, put yourself in someone else's shoes whom you interacted with, and think about how they would have liked the interaction, and how it could have been improved for them. Or, share your thoughts and feelings with people who are interested.

3. Savor positive experiences and sensations. Savoring seeks to intensify (through focused awareness) and prolong (through elaboration skills) momentary pleasurable experiences. The concept of savoring builds on one of the most basic activities in mindfulness meditation wherein one deliberately and systematically attends to every aspect of an experience. Things you can do include: deliberately savoring the presence of others, and focusing on, recalling, and writing about pleasant aspects of your environment and life.

4. Cultivate and express gratitude. Gratitude refers to the emotional response accompanying the acknowledgment that some outside force is responsible for something good that has happened to you. This might include starting a "gratitude reflection" journal, where each day you write down three things that you're thankful for (be as specific as possible). Or, engage in gratitude-motivated activities such as writing a 'gratitude letter' and sending it to a person whom you have never had a proper chance to thank.

5. Engage in kind acts. This includes both cost-free behaviors (e.g., holding a door for someone, complimenting a stranger) and behaviors that come at a personal cost (e.g., helping with household chores, buying a gift, or helping a colleague with a project).

Enhancing social well-being is one of the three pillars of Triple Bottom Line (TBL) management, and one of the two fundamental goals of Social and Ecological Thought (SET) management. Managers have known about the importance of social well-being at least since the human relations era (see Chapter 2), and subsequent research has confirmed that attending to the social well-being of employees can increase their motivation and productivity, and thus an organization's financial well-being. However, a fuller understanding of social well-being goes much deeper than ideas for improving productivity and profits. For example, attending to social well-being can decrease the suicide rate of employees' children, thereby going well beyond a narrow Financial Bottom Line (FBL) understanding.

In this chapter we lay the foundation for understanding social well-being. We will return in later chapters to look in more detail at many of the themes related to social well-being, such as leadership, motivation, groups, and teams. This chapter is organized around the three fundamental components that contribute to social well-being: meaningful work, meaningful relationships, and the opportunity to work in environments that are characterized by peace and social justice.[9]

MEANINGFUL WORK

In order to understand meaningful work, it is helpful to think first about the meaning of life. Questions about the meaning of life have been written about for millennia, but there is still no universally accepted understanding of what makes life meaningful. In part this may be because the meaning of life is shaped by our context and environment. Because the context and environment of humankind has changed a lot over time (e.g., from hunter-gatherer to post-modern societies), the way we think about the meaning of life is also changing. Even so, as depicted in Figure 5.1, there are two dimensions that are helpful for understanding the meaning of life: the *source* of meaning (transcendent vs. tangible), and the *focal point* of meaning (individualistic vs. holistic).[10]

Figure 5.1: Two key dimensions related to the meaning of life

Transcendent source:
Meaning comes from intangible experiences, relationships, and a sense of interconnectedness with others and with nature (more virtue = more meaning)

Individualistic focus:
Meaning comes when individuals are able to enhance their own identity and interests vis a vis others (getting ahead = meaning)

TBLa	SET
FBL	TBLb

Holistic focus:
Meaning comes by serving the interests of the greater good and ensuring there is enough for everyone (sharing and compassion = meaning)

Materialistic source:
Meaning is found in tangible achievements, outcomes and pleasures (more money = more meaning)

Regarding the *source* of meaning, western society has had a strong emphasis on materialistic measures of meaning for the last couple of centuries. Calling an organization or person “successful” typically suggests that they have achieved financial well-being (note that the word “success” refers to the accomplishment of a desired or meaningful end). Money has become the assumed goal that everyone desires. As noted in an earlier chapter, this definition of success is relatively recent in the history of humankind, as money itself is less than 4,000 years old. Even so, philosophers consider today’s emphasis on the meaningfulness of money as a hallmark of our society, which often gets in the way of other longer-standing intangible understandings of a meaningful life.[11]

In contrast to focusing on a monetary understanding of meaning, a transcendent understanding refers to people seeing themselves as being connected to an entity that is greater than or beyond themselves, and meaning is related to deliberately submitting oneself to this larger entity.[12] This can include the sense of well-being—which may be experienced as peace or happiness or fulfillment—that comes from feeling connected to a larger whole (e.g., an individual who does forest therapy[13] has a greater sense of connection to the whole than an individual who does not). Transcendent understandings are most transparent in management theory and practice in the “spirituality at work” literatures, where spirituality is defined as a sense of interconnectedness with others, nature, and some sacred other.[14] Even in western materialistic societies, 80% of college students have an interest in spirituality, and almost half (48%) believe that it is “very important” or “essential” that their college encourages their personal expression of spirituality.[15]

Regarding the *focal point* of meaning, western society has had a strong focus on an individualistic understanding of meaning. This perspective emphasizes that organizations and people become successful by out-competing others, by pursuing their own self-interests and values, and by getting ahead. This individualistic focus is also relatively recent in the history of humankind, whose self-understanding has in the past generally been based on communal philosophies like Ubuntu: “I am because I belong.” Here the emphasis is on enhancing the greater good, for example, by bettering the lot of people who live in socio-economic conditions that make them unable to feed their families and provide for education for their children.

WHERE WE ACQUIRE OUR UNDERSTANDING OF MEANING

What we perceive to be the meaning of life is greatly influenced by socio-cultural factors in our external environment, including the family values in our childhood home, our understanding of morality and ethics,[16] the messages about success embedded in the media, our organizational role models and mentors, and the culture and values in the countries where we live. With respect to ethics and morality, for example, your understanding of what is meaningful will be informed by your level of moral development. You may be pre-conventional (“what’s in it for me?”), conventional (“what are the people around me doing?”), or post-conventional (“what are the timeless truths?”).[17] Similarly, your views will be influenced by whether you believe ethics are established by some sort of a deity, or whether you think they can be derived from observing natural interactions, or both. The first chapter of this book describes how variations of a consequential utilitarian moral point of view underpin FBL and TBL approaches, and how a virtue theory perspective underpins SET management.

For an example of how national cultures and values shape people's views of the meaning of life and work, Figure 5.2 shows where countries rank in their relative emphases on the two key dimensions related to Figure 5.1: materialism and individualism (low, medium, and high).[18] As might be expected, countries that rate high in both materialism and individualism—like the U.S., the U.K. and Australia—are precisely the ones where FBL management theory and practice has been the most-developed. On the other hand, we would expect to see management practices more aligned with SET management to be observable in countries like Costa Rica and Peru. Consistent with this expectation, Costa Rican managers are five times more likely to prefer a management style where they consult with and invite members to participate in decision-making, than a style based on managerial authority and persuasion.[19] Similarly, it is not unexpected that Costa Rica is seen as a world leader in using eco-tourism (which promotes natural attractions while minimizing visitors' ecological impact) as a strategy for economic growth,[20] and that it is a leader among low-income countries in environmental programs[21] (to the point where one study suggests that its forest stock is "sub-optimally large").[22] More generally, in a study that compared 178 countries according to how well people were able to live long, happy lives with minimal impact on the natural environment, Costa Rica ranked in the top three.[23]

Figure 5.2: Relative emphasis (high, medium, low) that different countries place on the materialism vs. transcendent source, and on the individualistic vs holistic focus[24]

Transcendent source

	Sweden, Norway, Finland, Denmark, Netherlands, France	Spain, Portugal, Uruguay, Iran	Costa Rica, Peru, El Salvador, Chile, Guatemala, Thailand, South Korea	
Indivi-dualistic focus	Canada, New Zealand, Belgium	India, Israel, Greece, Czech Republic, Turkey, Brazil, Argentina	China, Taiwan, Hong Kong, Malaysia, Pakistan, Indonesia, Singapore, Panama	**Holistic focus**
	Germany, Ireland Switzerland, Italy, UK, South Africa USA, Australia	Japan, Jamaica, Philippines, Mexico, Austria, Hungary, Poland	Ecuador, Colombia, Venezuela	

Materialistic source

As might be expected thanks to a materialist–individualist emphasis on maximizing productivity and financial well-being, the per capita GDP in the U.S. is almost four times greater than that of Costa Rica. It also takes about 269 acres of natural resources to sustain the lifestyle of the average American, but only 35 acres for the average Costa Rican.[25] Interestingly, the overall life satisfaction scores for the U.S. (7.4) and Costa Rica (7.5) are virtually identical. The same holds true for life expectancy scores, with the U.S. at 77.4 years and Costa Rica at 78.2 years (the highest life expectancy in the western hemisphere). The average Costa Rican and the average American live equally satisfying lives, even though the average Costa Rican consumes much fewer resources (13% of the average American) and has a lower per capita GDP (27% of the average American).[26]

MEANINGFULNESS AT WORK

Meaningful work *enhances the meaning of life of those doing the work*.[27] Because people spend so much time at work, it becomes a primary source of their purpose, identity, and belonging.[28] For over thirty years Americans have said that meaningful work is more important to them than income, hours, job security, and promotions.[29] In one study almost two-thirds of Millennials said they would prefer to earn $40,000/year in a job they love, rather than $100,000/year in a job that they find boring.[30]

Research has shown that meaningful work influences many of the most important outcomes in organizational studies, including job performance, job satisfaction, work motivation, engagement, absenteeism, empowerment, stress, organizational commitment and identification, and customer satisfaction.[31] According to the three key criteria identified in the literature, work is more meaningful for people who:

1) experience a fit between their job and their sense of purpose/true self (e.g., their job is consistent with what they perceive to be the meaning of life);

2) believe that their work gives them power and opportunity to make a positive difference in the world; and

3) feel valued and a sense of belongingness in their workplace.[32]

Work that is not meaningful may lead to depression, decreased psychological well-being, lower self-esteem, poorer resilience to burnout,[33] and higher risks of suicide.[34] Unfortunately, work-related issues associated with low levels of psychological health are increasing. Depression and anxiety disorders have been identified as the leading cause of absence, sickness, and long-term work incapacity in most developed countries.[35] Every year mood disorders result in over 300 million lost workdays and over $50 billion in losses in the U.S.[36] A 2015 Gallup poll showed that 14% of workers were completely dissatisfied with their on-the-job stress levels, 19%

Work that is not meaningful may lead to depression, lower psychological well-being, lower self-esteem, poorer resilience to burnout, and higher risks of suicide.

somewhat dissatisfied, 35% somewhat satisfied, and only 28% completely satisfied.[37]

Even small improvements in well-being[38] can have significant effects.[39] For example, on a well-being scale of 1 to 100, if one employee rates herself as a 75, and a second as a 70, the first employee has 15% less risk of depression or anxiety, 19% less risk of having sleep disorders, 15% less risk of diabetes, and 6% less risk of obesity.[40] Moreover, well-being in the workplace may be contagious, so that high well-being for one member of a work team results in a 20% increase in likelihood that another team member will be thriving six months later.[41]

The FBL approach to meaningful work

FBL management promotes the view that the meaning of life has a lot to do with individuals and organizations achieving *financial* success. Work is seen as meaningful if it increases productivity, sales, and financial well-being, all of which are hallmarks of the FBL approach. Such a message is promoted in mainstream marketing which, in terms of dollars, costs more than all the money spent on public education on the planet. In particular, because 75% of the advertising that consumers see is paid for by the world's 100 largest corporations,[42] it should not come as a surprise that the messages promoted in the mass media have been dominated by four key values that are consistent with the FBL approach:

1. Happiness is found in having things (materialistic source);
2. Get all you can for yourself (individualistic focus);
3. Get it all as quickly as you can (short time horizon); and
4. Win at all costs (competitiveness).[43]

This message seems to have had an effect. According to a Gallup poll,[44] the average American works about 44 hours per week, and 37% of Americans would like to work more hours to earn more income. However, while such increases may lead to short-term benefits and meaning, in the long term overworking results in increased depression, stress, and poor health.[45] It is clear that FBL management is not the first choice of the incoming cohort of Millennial employees, 88% of whom disagreed with the statement "money is the best measure of success."[46] When management students were asked in which quadrant in Figure 5.1 they would prefer to be managed, only 7% choose the FBL quadrant; 50% preferred TBL approaches, and 42% preferred SET management.[47]

The TBL approach to meaningful work

For TBL management, the financial benefits of providing meaningful work—increased performance/motivation/commitment, and reduced costs due to decreased turnover and stress days—have been known since the start of the human relations movement. TBL management tries to increase meaningful work insofar as it improves an organization's financial well-being by designing jobs that have task significance (the tasks being performed have a positive impact on other people's lives or work),[48] and by increasing autonomy, skill variety, and task identity (employees can see how their work fits into a coherent whole). These characteristics have been shown to promote meaningful work and to improve performance.

75% of the advertising that consumers see is paid for by the world's 100 largest businesses.

TBL management considers social well-being as one of the three pillars of the triple bottom line. In terms of Figure 5.1, management consistent with the TBLa quadrant does this by empowering members to take more control by participating in the shaping of their work. For example, whereas FBL management puts greater emphasis on top-down job design where managers develop the jobs that shape members' experience of meaningfulness, TBL management puts greater emphasis on *job crafting* where members design their own jobs to be meaningful based on their own experience.[49] Job crafting involves changes to the cognitive meaning of the task (e.g., hospital janitors provide clean rooms to help care for and heal patients, and a cashier in a theatre is part of providing entertainment to patrons).[50] Job crafting also includes adding choice to the job tasks (e.g., the amount of energy and time spent on specific sub-tasks), and the people an employee relates to. Management within the TBLa quadrant is also evident when employers encourage workers to enroll in proven ways to reduce workplace stress and improve concentration, such as providing mindfulness training.[51]

Glimpses of the TBLb quadrant are evident when enhanced pro-social holistic dimensions of work increase the perception that the work is meaningful. For example, workers tasked with phoning university alumni to raise funds for scholarships were more productive, and found their work to be more meaningful, after they met students who had actually received scholarships.[52] The benefits of a pro-social focus are also evident in terms of the overall vision or mission of TBL organizations, which often seek to improve the social well-being of stakeholders. The transformational leadership literature talks about how performance can be enhanced by inviting employees to share the noble vision of an organization. The TBLb quadrant also places greater emphasis on group or team-based interventions to improve meaning; this includes active involvement and participation of members in developing shared work-related goals and action planning. These have been found to be more effective than focusing on individual employees.[53]

The SET approach to meaningful work

SET management also supports the value of mindfulness training and job crafting, but the SET approach asks bigger questions about why such stress-reduction is needed in the first place. Rather than instrumentalize mindfulness to serve an organization's financial well-being, a holistic understanding of mindfulness requires rethinking the concept of how and why we work.[54] From a SET perspective, FBL and TBL understandings of meaningful work are inherently flawed because they link it to increasing financial and material success in a finite world. SET management takes seriously the warning given by Max Weber, who characterized FBL and TBL management as "Specialists without spirit, sensualists without heart; this nullity imagines that it has attained a level of civilization never before achieved."[55] A SET approach also acknowledges Adam Smith's concern that productivity-maximizing practices like the division of labor would result in workers becoming "as stupid and ignorant as it is possible for a human creature to become."[56]

SET management inverts some of the truisms of the FBL and TBL approaches. For example, SET argues that more meaning comes from giving than from taking. While it is true that people find their jobs more satisfying the more help they get from co-workers, SET management underscores the idea that people find their jobs more meaningful the more assistance and support they *give* to others (e.g., opportunities to care for/assist/mentor/support a colleague).[57] Similarly, rather than focusing on meeting the *wants* of customers, SET management promotes meaningful work that serves the *needs* of others.

The SET approach is consistent with the growing voluntary simplicity movement, where meaning comes from deliberately working fewer hours and choosing wholesome places to work. It recognizes that social well-being does not come from having more than enough stuff, but rather from doing what is meaningful and earning enough money.[58] People are increasingly more interested in the quality of life and a sense of community and social equity, than they are in material and economic rewards, prosperity and control.[59] One study found that 93% of Americans believe people are too focused on working and making money and not focused enough on family and community. More than half have voluntarily opted not to maximize their material wealth in order to facilitate other forms of well-being.[60]

93% of Americans believe people are too focused on working and making money, and not focused enough on family and community.

SET management recognizes that management practices that increase the gap between rich and poor are problematic.[61] Work is more meaningful if it serves the interests of the relatively poor, and especially if it promotes and develops structures that enable people who have been marginalized to work to provide for the needs of their families. Even people from relatively wealthy countries are challenging systems that they see as unjust, even when those systems serve their own financial self-interests.[62]

Finally, an emphasis on a holistic focus and a transcendent source is evident in the increasing interest among management practitioners and scholars in spirituality and religion.[63] Almost by definition, a focus on the material realm is opposed to a focus on spirituality. Similarly, the self-interested nature of individualism counters the teachings of many religions. Should ideas about spirituality be part of the study of management? It seems likely that religious and spiritual worldviews have helped to shape management theory and practice, given that over 80% of the people in the world espouse and hold such worldviews.[64] The growing interest in this area is reflected in the creation of the

"Management, Spirituality, and Religion" interest group in the Academy of Management (the world's largest and most-prestigious scholarly association of management). Four of every five professors in the U.S. (81%) describe themselves as spiritual persons. Three of every five business professors also think that the spiritual dimension of faculty members' lives has a place in their jobs as academics, and one of three business professors think that colleges should be concerned about facilitating students' spiritual development. We also know that four out of five students (80%) have an interest in spirituality, and that almost half (48%) of incoming college students believe that it is "very important" or "essential" that their college encourages their personal expression of spirituality. Even so, students say that professors do not encourage such discussion (62%), nor do they raise questions about the meaning and purpose of life (56%).[65]

Half of incoming college students believe that it is "very important" or "essential" that their college encourages their personal expression of spirituality.

RELATIONSHIPS

It is noteworthy that when management books or courses talk about interpersonal relationships—be they relationships with co-workers or with suppliers or managers—it is primarily in terms of their instrumental qualities, with an emphasis on social skills that enable managers to increase workers' motivation and productivity, to negotiate a lower price from suppliers, or to increase customer loyalty. These skills focus on how we can "use" other people like we use instruments to get something accomplished, so they are called *instrumental* skills. In contrast, the purpose of *non-instrumental* relationship skills is to develop and deepen interpersonal connections, to share joy and excitement and grief and loss, and to foster love, trust, and mutual acceptance.[66] Surprisingly little discussion or research looks at social skills for facilitating non-instrumental friendships with co-workers, suppliers, and customers, which are the settings where we spend a large portion of our lives. And yet, many people would agree that non-instrumental friendships are crucial to social well-being and a meaningful life.[67]

Friendship in the workplace leads to life satisfaction and positive emotions.[68] Non-instrumental friendship is evident when co-workers voluntarily hang out together outside of work hours and do things totally unrelated to work. Non-instrumental relationships grow when you do something for someone else without expecting anything in return (e.g., paying it forward), which is also a hallmark of meaningful work. In contrast, workplaces that promote instrumental relationships and competition among workers may create health issues and decrease mutual problem solving.[69]

Awareness of the links between economic activity, friendship, and social well-being date back to the earliest understandings of economics. For example, Aristotle saw economics as a means to enhance deep happiness (*eudaimonia*) in community; for him it was dysfunctional for economic activity to instrumentalize relationships in order to maximize financial wealth. Similarly, in more recent history, initially the science of economics in countries like Italy focused on public happiness, and only later added a link to financial wealth.[70] Research shows that more happiness comes from having deep and stable relationships than from consuming luxury goods, because such consumption is fleeting and insatiable.[71]

And yet, close friendships are rare not only in the workplace, but may be becoming less frequent in social life in general.[72] This leads to loneliness and social ill-being.[73] Instrumental relationships are no substitute; someone can be lonely even if they are never alone thanks to having many instrumental relationships. In contrast, non-instrumental relationships reduce loneliness.[74]

So why does there seem to be a shortage of non-instrumental relationships? Is it because clever advertisers have convinced us that happiness and meaning can be achieved via financial and material success? If money does buy happiness, then there should not be a qualitative difference in the happiness that comes from, say, going on a date with a friend versus with a paid escort. Have social media and the digitization of our world contributed to the loss of social skills to have meaningful face-to-face relationships (e.g., the more people use Facebook, the more their mental health deteriorates[75])? At a time in history when we meet more people than ever before, we rely on impersonal dating apps to introduce us to potential long-term meaningful relationships.

Perhaps we shy away from non-instrumental relationships because we have been socialized to avoid non-transactional relationships. When we enter into an instrumental relationship, it is like making a financial investment: we give up something in order to get something in return. And in order to win, we are told to minimize what we give and maximize what we get. This results in a Banker's Paradox, where banks prefer to loan money to people who present minimal risk, and thus people who are the neediest often cannot get a loan.[76] Similarly, transactional thinking tells us to invest our time and energy in developing friendships with well-connected people who have the most to offer us, and thus we are prone to neglect individuals with the greatest need and who are least able to offer something in return in the future. This is illustrated by the mantra of mainstream human resource management: hire the brightest and the best. However, as the ancient wisdoms were fully aware, having relationships with people who have nothing of instrumental value to offer you creates inherent value and joy.[77] Moreover, such relationships improve your ability to nurture non-instrumental relationships with everyone. Befriending those with low instrumental value enables you to relate to the whole community in a way that relating to only people with a similar socio-economic background simply cannot. It opens your window to experience altruistic mutual benefaction.[78]

There is inherent meaning and joy in befriending people who have nothing of instrumental value to offer to you.

Different ways of encouraging the development of non-instrumental relationships and skills in the workplace are being developed. For example, up to 20% of businesses pay workers to do volunteer work, often with chronically underemployed or socio-economically challenged people (e.g., Montreal's Tomasso Corporation and the U.S. Bank employees work in soup kitchens).[79] In some business schools students are asked to engage in service learning projects, or do practicums where they work with people who are chronically unemployed.[80]

THE FBL APPROACH TO RELATIONSHIPS

FBL management has a strong focus on instrumental relationships and on ensuring that they are managed in ways that optimize productivity and financial well-being. When non-instrumental relationships are discussed, it is often with a negative connotation (e.g., as wasting company time). This negative bias toward non-instrumental relationship is not surprising, given that FBL management historically provided an antidote to nepotism and cronyism (i.e., managers giving jobs to family or friends without regard for their qualifications).

THE TBL APPROACH TO RELATIONSHIPS

For TBL management, non-instrumental relationships can be positive if they enhance workplace motivation and productivity, such as when an intra-organizational sports league provides friendly competition amongst team members. Similarly, leaders are encouraged to develop social skills—such as emotional intelligence competencies to empathize with others, the ability to manage one's own emotions in order to improve communication, and skills in establishing trusting and mutually satisfying relationships—because such social skills are associated with financial benefits.[81]

For TBL management, non-instrumental relationships can be positive if they enhance workplace motivation and productivity.

TBL management's embrace of work-life balance may be the best example of its recognition of the importance of non-instrumental relationships to enhance an organization's financial well-being.[82] However, note that work-life balance is less about creating non-instrumental relationships at work per se, and more about recognizing the importance of non-instrumental relationships outside of work.[83] Moreover, the work-life balance is justified in TBL management because it is seen as creating a more motivated, loyal, and productive workforce, which in turn enhances financial well-being.

THE SET APPROACH TO RELATIONSHIPS

For SET management, life is too short to spend most of it working in organizations where non-instrumental relationships are seen as inefficient or are a poor use of time. SET management refuses to treat workplace relationships as mere instrumental exchanges between workers, suppliers, and customers. The SET approach sees economic relationships not as impersonal or anonymous commodities, but rather as instances of mutual assistance. This means rethinking ideas like *goods* and *services*, and looking at what makes them truly *good* and truly acts of *service*. SET management seeks to re-personalize and de-commodify goods and services, and embrace how they are making the world a better place for society. The SET approach takes what are conventionally viewed as instrumental relationships, and (re)infuses them with non-instrumental meaning. So, for example, a SET financial services firm does not sell as much product as possible in order to maximize its own profits; rather, it seeks to truly serve the needs of its customers. In SET organizations co-workers become friends whom you look forward to spending the day with as you work alongside them to serve customers. Co-workers are much more than "human resources" that you negotiate with to get instrumental work accomplished. Even suppliers and competitors become friends. Consider the following example from the CEO of a successful SET medical supply company in Brazil:

> "Many businesses have tried to copy our [beyond instrumental] way of working. Our competitors are shocked by the fact that we are happy to show them how we work—and they try to do the same. They don't manage to copy our way of working, however, because it is not a formula that says 'do this' 'do that' . . . it is a way of being, a way of acting. Last year there was a competitor who tried to attack us on every corner . . . creating a very difficult situation for our business. At a certain point, the law in Brazil changed and it was a very important change. In order to help this other business, we faxed the news to them. The business owner was so struck by our gesture that he not only wanted to reestablish his friendship with us, but he offered to help us in areas that we find difficult. It was through him that we had the idea of getting in a consultancy—the best decision that we ever made. That consultant was so impressed by how we run our business that he goes out of his way to help us in whatever way he can. *This all started through responding to the aggression of our competitors with a different attitude*."[84]

Perhaps most importantly, SET management reintroduces the idea of compassion and altruism into management, which a growing body of research suggests is an inherent part of human nature.[85] **Compassion** *means standing alongside and doing what you can to support people who are suffering*. In management terms, it means creating organizational structures and systems that address the needs of people who are suffering, perhaps especially for people who may not

Compassion means standing alongside and doing what you can to support people who are suffering.

have much in the way of instrumental resources to offer in return.[86] SET management's emphasis on compassion is consistent with people's natural values, but often inconsistent with their socially-constructed expectations of management. For example, freshman students at Harvard consistently ranked compassion near the top of their personal values (and power and wealth near the bottom), but they ranked compassion near the bottom of Harvard's.[87] What happens when managers are asked to park their compassion at the door? Is there any wonder depression rates are increasing?

The discipline of gratitude can help people to become more content with having enough (not always needing more), which in turn is an important step in ensuring that others have enough and promoting pro-social relationships in the workplace. Managers who set up organizational structures and systems that model and encourage members to express gratefulness (e.g., when managers write notes of appreciation it may heighten the likelihood of co-workers expressing thanks to others), will in turn foster values consistent with persistent gratitude (e.g., humility, benevolence), which will in turn foster collective gratitude at an organizational level (e.g., corporate social responsibility).[88]

Peace and Social Justice

The third pillar of social well-being is related to peace and social justice. This includes issues like bullying in the workplace, unsafe working conditions, conflict within and between organizations, and so on (see also Chapter 17).[89] Unfortunately, many people live in communities and countries where their personal safety is in jeopardy. This may be because they live in the "wrong" part of town—for example, where there are violent gangs and racism—or because they live in the "wrong" part of the world. For example, roughly one billion people live in war-torn countries,[90] and almost 0.8% of the world's population is refugees seeking asylum or is internally displaced.[91]

A lot of resources are spent keeping the world secure, costing an estimated US$10 trillion a year; this amounts to about $1,350 for every person on the planet, and about 11% of global world product.[92] In 2015 about 0.8% of the world's workforce was part of the world's armed forces (27.5 million people), and military expenditures represented about U.S. $1.7 trillion (about 2.25% of global GDP; the U.S. alone spent $596 billion, about 35% of world's total expenditures).[93] This is a significant part of the economy, and some have suggested that "war is good for business."[94] In 2016, the world's top 20 arms dealers had sales of US$234 billion and about US$15 billion profit, and created about 667,000 jobs (about $22,500 profit per employee).[95]

An estimated US$10 trillion is spent every year keeping the world secure.

Similarly, war and conflict support the estimated $300 billion paid to private security companies, which can represent up to 50% of the personnel in military conflicts.[96] For example, about $30 billion is spent by the U.S. Department of Defense[97] in places like Afghanistan, which several years ago had about 108,000 private contractors working alongside U.S. military personnel (about 15% of whom provided security, while the rest provided service like food, laundry, and maintenance.)[98] Dating back at least as far as U.S. President Eisenhower, people have been concerned about the strength of the "military/industrial complex," noting that in countries where a significant number of people are employed by businesses supporting military operations (contractors, arms producers, fighter jets, etc.) there may be political pressure to engage in wars in order to preserve jobs that create and manufacture weapons.

The steep financial and social costs associated with war can be illustrated by the wars in Iraq and Afghanistan (and related violence in Pakistan), where one estimate suggests that the U.S. government has spent or is obligated to spend almost US$5 trillion (over $15,000 per U.S. citizen).[99] Beyond these financial costs, these wars have also created enormous negative social externalities. About 7,000 U.S. soldiers have been killed in Afghanistan and Iraq, plus another 7,000 contract workers supporting U.S. troops, plus another 50,000 security personnel from Iraq and Afghanistan. In addition, there are an estimated 217,000 civilians who died directly due to violence, and another 870,000 civilians who died indirectly due to injury, hunger and disease caused by the war. In addition to these 1.15 million deaths, these wars have resulted in about 100,000 U.S. veterans with a disability or suffering from trauma, and over 10 million refugees, leading to compromised childhoods, poor education, and under-productivity. In short, any economic or business benefits of war are far out-weighed by the negative social externalities.[100] An important question is whether such costs are necessary in order to prevent even greater costs related to, for example, dictators who use their power to violently oppress others.

TYPES AND SOURCES OF WAR AND PEACE

There are two basic ways of understanding peace: 1) as the presence of freedom and harmony, and 2) as the absence of war and conflict. The first approach is consistent with ancient ideas like *shalom* and *shanti*, which envision a time when everyone has enough and there is mutual understanding and respect within and among communities. Part of the reason that this vision has failed is because humankind has developed an insatiable appetite for more. Again, this is different than how things were for the first 30,000 years of humanity prior to the advent of money, when we harvested as much food as we needed (not more) and when we travelled light. By today's standards it was a largely egalitarian existence.[101]

There are two basic ways to understand peace: 1) as the presence of freedom and harmony, and 2) as the absence of war and conflict.

The second way to understand peace is as the absence of war. From this lens, international peace is often seen to coincide with the presence of superpowers. For example, during the time of the Roman Empire, the world enjoyed *Pax Romana* (Roman peace); there was much less conflict among states within the Empire than before, mainly because everyone was under the rule of the Empire, which established institutions of social justice. Of course, the nature of that social justice was based on terms and understandings created by the Roman elite and that served their interests. Thus, subjugated peoples often saw *Pax Romana* as a time of being oppressed by the Romans.[102] Arguably, a similar kind of peace also occurred during the period of colonialism, for example as illustrated by the British Empire. And today it may be evident in post-colonial empires, where colonialism and the slave trade are gone but have been replaced by economic powers that often perpetuate similar income inequality associated with colonialism.[103] Unfortunately, the stable socio-economic structures and systems that widen income inequality also reduce the world's overall quality of life and have led to conflict.[104]

Perhaps the most important economic factor that has contributed to wars over history is related to energy. The egalitarianism characterizing the hunting and gathering era changed starting about 12,000 years ago, as humankind learned to tame nature via the carbon-based agricultural revolution (which relied on using stored carbon in the soil to grow food). This so-called advent of civilization created hierarchical structures which, in simple terms, created elites and non-elites. The non-elite workers (often slaves) provided the energy that enabled civilization to prosper, and the desire for more workers and more land prompted many wars; in the 3,400 years since the advent of money, the world has been entirely at peace ago for only 268 years, or about 8% of recorded history.[105]

The need for human slaves changed when humankind started to access a more intense source of carbon—fossil fuels—to power machinery. As late as 1795, only 4% of the population—33 million people of the global population of 775 million—could be considered in any way to be "free."[106] Thanks in large part to the energy provided by fossil fuels, today a much greater portion of the world has escaped slavery (although recall that half the planet earns less than US$1000 per year). However, just as in the past—when wars were fought in order to acquire more land and more worker energy—today wars are often fought in order to ensure access to oil.[107] Since 1973, between 25% and 50% of all wars between nation states have been linked to oil.[108]

THE FBL APPROACH TO PEACE AND SOCIAL JUSTICE

International trade facilitates peace among nations.

There is general agreement that international trade facilitates peace among nations. When two countries trade with each other, they become dependent on each other for goods and services, and for jobs related to creating goods and services.[109] As we noted in Chapter 3, FBL management has promoted financial institutions and the establishment of international stable economic relations. Many of these institutions were set up in the wake of World War II to safeguard the economic prosperity of the victors, while enabling the economic development of war-torn and low-income countries. While these policies may have been effective in reducing subsequent wars, they were not as effective as hoped for towards enhancing the socio-economic development of low-income countries.[110]

Some of the shortcomings may be attributable to the observation that FBL management often has an **ethnocentric orientation,** *which is evident when managers enter a foreign country with the belief that practices from their own home country offer the best way to manage in a foreign country*. Such an approach may be especially likely when managers believe that their home country is more advanced or developed than the foreign country that they are working in. FBL management is particularly interested in doing business overseas in countries whose infrastructure is well-suited to support the financial goals of the firm. Following Michael Porter's "diamond of international competiveness" approach, this would include: 1) how business-friendly the foreign government is (e.g., competition is regulated to be fair, tax incentives are available); 2) whether the local infrastructure is well-developed (e.g., transportation, healthcare, education, access to energy); 3) whether related and supporting industries are adequate (e.g., suppliers), and 4) whether there is sufficient local demand for the company's output.[111]

Such instrumentally-minded ethnocentrism has contributed to major cultural misunderstandings in history, and to ongoing social problems that continue to the present day. This is illustrated by what has happened to Indigenous people around the world when their land was settled by foreigners. For example, when Europeans first arrived in North America, their understanding of land ownership was dramatically differently than the ideas and values of the Indigenous Ojibway people. For the Ojibway, the land is something that people can use, and something that they are stewards over for future generations. When the Europeans asked to make trades for property and land treaties, the Ojibway saw this as a request to *share* the use of the lands. The Ojibway did not see this as giving up their ownership of the lands because, in their culture, they never had that sort of ownership in the first place. For them it would be presumptuous to think that a person could own a piece of land because land was sacred and defied ownership (e.g., just like you could not "own" a god).[112]

Shortcomings of an ethnocentric FBL approach are apparent when managers from high-income countries use their economic power to implement practices that do not respect or take into account socio-cultural issues in low-income countries.

Similarly, today the dangers of an ethnocentric FBL approach are especially apparent when managers from high-income countries use their economic power to implement practices that do not respect or take into account local socio-cultural issues. This is perhaps most evident in the global mining industry.[113]

THE TBL APPROACH TO PEACE AND SOCIAL JUSTICE

TBL management builds on and elaborates the FBL approach by setting up institutions with a specific focus on social justice. For example, the UN Global Compact facilitates peace by calling on businesses to support human rights laws, eliminate forced or compulsory labor, abolish child labor, eliminate discrimination in the workplace, and work against all forms of corruption. The UN Global Compact has in turn become a founding member of institutions like the "Principles of Responsible Investment" and the "UN Sustainable Stock Exchange."

TBL management recognizes the need to follow universal global standards, while adopting a polycentric orientation. **Polycentrism** *is evident when there is an assumption that managers in a host country know the best way to manage an organization in their country*. Managers with a polycentric orientation believe that the best way to maximize their firm's profits is to adapt to the best practices operating in foreign countries.[114] In terms of Porter's diamond, when it comes to international operations, TBL management is especially interested in countries who support socially responsible business by considering: 1) what sorts of incentives governments provide for being socially responsible, 2) whether there are local networks that support responsible business (e.g., chamber of commerce, local UN Global Compact chapter); 3) whether there are appropriate human resources, suppliers, and financial institutions to support responsible business, and 4) whether local stakeholders are able to purchase the organization's outputs. The "Base of the Pyramid" approach is perhaps the best example of how TBL management seeks to enhance social well-being among the world's poorest people (see Chapter 3).

THE SET APPROACH TO PEACE AND SOCIAL JUSTICE

SET management emphasizes that businesses should proactively develop social justice and peace. For example, as stated in the 2009 Caux Round Table (CRT) Principles of Business: "while laws and market forces are necessary, they are insufficient guides for responsible business conduct."[115] In other words, SET management encourages businesses to go beyond merely obeying the law, to actually creating positive social externalities. This is illustrated in the first two of CRT's Principles for Responsible Globalization:

> Principle #1: "As responsible citizens of the local, national, regional, and global communities in which they operate, businesses share a part in shaping the future of those communities," and
>
> Principle #2: "Businesses established in foreign countries to develop, produce, or sell should also contribute to the social advancement of those countries by creating productive employment and helping to raise the purchasing power of their citizens. Businesses also should contribute to human rights, education, welfare, and

vitalization of the countries in which they operate."[116]

SET management promotes an egalicentric approach to international socio-cultural differences.[117] **Egalicentrism** *is characterized by two-way, give-and-take communication that fosters mutual understanding and community.* SET management does not try to impose a "one size fits all" management style in foreign countries (ethnocentrism), nor does it simply accept that "local managers know best" (polycentrism). Rather, SET management recognizes that international management works best when people from different cultures interact with and learn from one another, resulting in knowledge and practices that neither could imagine on their own.[118] Egalicentrism is not so much picking and choosing the "best of" practices around the world as it is developing new approaches by working alongside people who are different. In terms of Porter's diamond, when it comes to international operations, SET management is especially interested in countries that have a mutual interest in improving social well-being by: 1) working with government to promote social responsibility; 2) establishing and nurturing local networks that support responsible business; 3) training and developing appropriate human resources, suppliers, and financial institutions that support responsible business, and 4) educating local consumers about the merits of responsibly produced outputs.

Examples of SET management in practice include fair trade chocolate companies like Divine Chocolate, retailers like Ten Thousand Villages, and producers like *31 bits*. SET management is also evident when, during a spike in violence between Palestinians and Israelis, the owner of the Humus Bar in Tel Aviv, Kobi Tzafrir, offered a 50% discount to Arabs and Jews who dined together.[119] Another example is the Conflict Kitchen, an American take-out restaurant that seeks to improve international peace and understanding by deliberately preparing foods associated with countries that the U.S. is in conflict with (e.g., *doenjang jjigae*, a traditional North Korean stew).[120]

During a spike in violence between Palestinians and Israelis, the owner of the Humus Bar in Tel Aviv offered a 50% discount to Arabs and Jews who dined together.

ENTREPRENEURSHIP IMPLICATIONS

This chapter, and the two preceding it, define three different kinds of well-being and invite entrepreneurs to think about the purpose of their entrepreneurship. How entrepreneurs define success has powerful implications for the results that entrepreneurs produce. It is therefore essential that entrepreneurs clearly understand their reasons for starting an organization. Why do they want to start to an organization? How will they know if it is successful?

As we noted in Chapter 1, outcomes like revenue, profit, and market share typically come to mind as reasons for starting a business. But these factors are not the primary motivations for most entrepreneurs. Instead, the two most frequently mentioned reasons are: (1) to gain greater freedom and autonomy/more interesting work, and (2) to address social and ecological problems in the world. The first reason has a focus on providing meaningful work for the entrepreneur,[121] and the second is related to addressing ethical issues related to social and environmental peace and justice.

PERSONAL WELL-BEING FOR ENTREPRENEURS

Most people adopt either a job, a career, or a calling orientation to work.

Our thinking about how entrepreneurship enhances social well-being from the entrepreneur's perspective can be informed by research showing that people usually adopt one of three different orientations toward their work.[122] People with a *job orientation* focus on financial rewards rather than achievement or pleasure; their work is not an important part of their lives but is used primarily as a way to earn money for other things that they enjoy. If you know someone who describes themselves as "working to live" and who cannot wait to get away from the office to pursue their true passion, that person likely has a job orientation. In contrast, people with a *career orientation* focus on success and advancement; their work is an important part of their lives and their work-related achievements help to define their identity as individuals. If you know someone who is committed to being the best at what they do, who networks constantly and pursues opportunities for promotion, that person probably has a career orientation. People with a *calling orientation* focus on the effects of their work; they view their work as a meaningful contribution to the world and it is often the most important thing in their life. If you know someone who feels they were born to do a particular task, that it is their mission in life and it seems to consume most of their time and thinking, that person may have a calling orientation.[123] It is interesting to note that the calling orientation may be on the rise: while surveys of working adults in the 1990s revealed a relatively even distribution of the three orientations,[124] a survey of first-year university students in 2010 found that 44% felt they had a calling in life and an additional 28% were actively searching for their calling.[125]

The orientation that entrepreneurs have toward their work—whether job, career, or calling—will likely influence their choice of management approach. Entrepreneurs who have a job or career orientation may be more likely to adopt FBL and TBL management, given their concerns with maximizing profit, competition, and success. In contrast, entrepreneurs with a calling orientation, with its focus on meaningful work and contribution, may be best served by SET management.[126]

Being aware of their work orientation can help entrepreneurs in their planning, and especially in selecting start-up opportunities that will enhance their personal social well-being. Since it is a lot of work to successfully launch and manage a new organization, entrepreneurs may benefit from pursuing opportunities that suit their orientations. If a person becomes an entrepreneur to get rich (job orientation), he or she will have greater personal social well-being, and likely greater success, in different ventures than would a person who starts an organization in order to win awards and gain recognition (career orientation) or to change the world (calling orientation). As a result, when evaluating potential opportunities, entrepreneurs should consider their own work orientation toward, using it as one of the factors that influence their choices. In particular, if you feel a sense of calling toward an activity, it is well worth exploring that option, because people who view their work as a calling tend to have greater commitment, work persistence, and job satisfaction.[127] Moreover, pursuing a calling, rather than a job or career, has the additional advantage of potentially benefiting other stakeholders at the same time that it benefits the entrepreneur, since callings tend to be holistically focused.[128]

ETHICAL ASPECTS OF ENTREPRENEURSHIP

The second most frequently mentioned motivation for becoming an entrepreneur is to solve problems or make the world a better place. This motivation is more holistic, recognizing the fact that entrepreneurship does not just affect the entrepreneur; it also affects the world. Because entrepreneurship affects others, it is an ethical activity, and entrepreneurs always face potential ethical dilemmas. **Ethics** *are the principles one uses to choose the right action, particularly when the action affects others*, and **dilemmas** *are situations in which one must choose when there is no obviously best choice*.[129]

Entrepreneurs constantly face ethical dilemmas. The entrepreneurial opportunity that is pursued, and how it is pursued, have important implications not only for the entrepreneur, but for all of the stakeholders who do – and do not – benefit as a result. As an example, recall Dan Price, the owner-manager of Gravity Payments described in the opening case of Chapter 3. Within four years of its founding, Gravity Payments was the largest credit processor in the state of Washington, had thousands of customers across the country, and was paying Price an annual salary of more than $1 million.[130] Judged by FBL management standards, Gravity Payments was a successful new company.

Because it affects others, entrepreneurship is always an ethical activity.

Was Price's decision to raise the minimum wage at Gravity to $70,000 good or right in an ethical sense? The answer to questions like this depends on the perspective from which an action is judged. For example, consider Price's actions in terms of the meaning of life dimensions depicted in Figure 5.1. First, along the horizontal dimension, Price's decision could be seen as being more holistic than individualistic. His holistic emphasis is evident in his making the change in order to treat his employees like family (rather than treating them instrumentally) and because he felt they needed at least $70,000 a year to feel secure in their lives.[131] Price's de-emphasis on individualism is evident in that much of the money used to pay for the raises came from Price himself, who (at least temporarily) reduced his own salary from $1.1 million to $70,000.[132]

Second, in terms of the vertical dimension of Figure 5.1, Price's actions can be interpreted to be more transcendent than materialistic. His actions certainly have a grounding in materialism—ensuring that everyone has *enough* money—but this is clearly not a case of it being better for him to have *more* money (which would be the assumption in a strong emphasis on materialism). Rather, Price was looking for family-like relationships in the workplace, and he chose the salary that he believed would create the most happiness, and his employees in fact reported feeling greater happiness.[133] In any case, Price's actions can be seen as ethical from the materialistic/holistic quadrant (it is good and right to share in tangible goods and accomplishments with others) and from the transcendent/holistic quadrant (it is good and right to share and facilitate family-like relationships among people).

However, when Price's actions are judged from within the individualistic/ materialistic quadrant of Figure 5.1.—which assumes that life is meaningful and good if we have positive material outcomes for ourselves as individuals—then he did not act rightly. From this perspective, Price's actions lowered his own income and material lifestyle, and thus decreased its meaningfulness. For example, in the summer of 2016 he rented his home through AirBnB to help cover its costs.[134] Moreover, because there is a competitive element in the individualistic focus, Price's decision to raise Gravity's minimum wage would also be judged poorly because, not only did he lose income and security, many others gained where he lost; he is no longer "winning" by as wide a margin in the competition that is assumed by an individualistic focus. Indeed, some employees left the company as a result of the pay change. Those employees told the media that raising everyone to the same salary minimum was unfair because it treated everyone equally.[135] For example, an employee who had been with the company for its entire ten years and was being paid $60,000 would get a $10,000 raise, while someone who had only been with the company for a year being paid $35,000 would get a $35,000 raise. An employee being paid more than $70,000 would get no raise at all. Price's change failed to protect existing pay differentials, and the loss of relative wealth is problematic from an individualistic perspective.

Entrepreneurs shape the world, affecting stakeholders' financial, ecological, and social well-being.

As the Dan Price example illustrates, entrepreneurial actions have ethical implications. No matter what choice is made, some stakeholders will gain and others will lose. As a result, whether they realize it or not, entrepreneurs are shaping the world—affecting stakeholders' financial, ecological, and social well-being—when they create and manage their organizations. The things that organizations do, and do not do, reflect the ethics of the entrepreneurs who create them. It is therefore crucial that entrepreneurs think about their ethical assumptions and their motivations when creating their organization.

Chapter Summary

1. What someone considers to be meaningful work is related to how they think about the meaning of life, including whether they think the source of meaning is materialistic or transcendent, and whether the focus is individualistic or holistic.

- FBL management tends to have a materialistic/individualistic understanding of meaningful work, which it facilitates via job design and consumeristic messaging
- TBL management tends to have either a transcendent/individualistic or a materialistic/holistic understanding of meaningful work, which it facilitates via job crafting and pro-social messaging
- SET management tends to have a transcendent/holistic understanding of meaningful work, which it facilitates via encouraging generosity and voluntary simplicity

2. When it comes to nurturing meaningful relationships for organizational members:

- FBL management promotes friendly competition and emotionally intelligent motivational skills
- TBL management promotes work-life balance
- SET promotes the putting the person back into what have become instrumental relationships, and showing compassion and gratitude in the workplace

3. When it comes to ensuring peace and social justice for everyone:

- FBL management emphasizes initiatives that promote international trade and practices that support financial well-being; it tends to have an ethnocentric orientation
- TBL management emphasizes initiatives consistent with the UN Global Compact and practices associated with the Base of Pyramid idea; it tends to have a polycentric orientation
- SET management emphasizes initiatives consistent with the Caux Round Tables and practices associated with fair trade; it tends to have an egalicentric orientation

4. Entrepreneurs' orientations to their work—be it a job, a career, or a calling orientation—will influence the social well-being associated with their organizations.

5. Because it influences the well-being of both entrepreneurs and stakeholders, all entrepreneurial activity has ethical implications.

Questions for Reflection and Discussion

1. Think back to the opening case and imagine that you have a leadership role in your school (e.g., President, Dean, professor, leader in a student group). What can you do in your current role to improve mental well-being for students in your school? Now that you know about the factors that can enhance your mental well-being, will you implement them in your own life? Explain.

2. Do you think it should it be a priority for managers to create organizational structures and systems that foster mental health and well-being, or is that outside of their realm of responsibility? Are you aware of specific managers who are particularly good (or bad) at nurturing mental health and well-being? If so, describe what they do.

3. Should management courses engage students in thinking about the meaning of life? Or is that better left to courses in philosophy? What are the default assumptions about the meaning of life in a business school likely to be if the issue is not openly discussed?

4. Ask three people you know if they think their job is meaningful. How do they define meaningfulness? Then ask them how well their work satisfies each of the three criteria for meaningful work that are discussed in this chapter. What have you learned from listening to your friends talk about their experiences at work?

5. How important is it to you that you find meaningful work in your career? How important is it to ensure that, when you become a manager, the people who report to you find their jobs to be meaningful? Would you prefer a job that is meaningful to you and pays $40,000 a year, or a job that is boring and pays $100,000 a year?

6. Do you think it is realistic for a manager to permit employees (or even encourage them) to invest time in developing non-instrumental relationships at work? Is there a business case for doing so (e.g., reducing turnover, improving productivity, attracting Millennials)? What if there isn't a business case? Is de-commodifying relationships with suppliers and customers the right thing to do, even if this compromises the ability for an organization to maximize its financial well-being?

7. How important is it for businesses to nurture peace and security as a positive social externality? When is this best left to the government, or to the military? How big of a role do you think economic factors play in war? How important is energy?

8. This chapter describes many different ways to think about the meaning of life and social well-being. What entrepreneurial opportunities do you see in those ideas? What is a problem you might be able to solve? A solution you could offer? Think of at least five ways an entrepreneur might create value in terms of social well-being.

9. Imagine yourself pursuing one of the opportunities you identified in the previous question. Which work orientation would you be using? Why? Do you like the implications of that choice? How might you change your response to improve it?

Preview and Summary for Chapter 6

	FBL	TBL	SET
Most valued benefits of entrepreneurship			
- as new start-up	Economic activity (and jobs and innovation)	Create satisfying jobs (and economic activity and innovation)	Socio-ecological innovation (and meaningful jobs and economic activity)
- as small enterprise	Opportunity for growth/financial return (and to target specific opportunities)	Opportunity for growth via targeting specific/ narrow triple bottom-line opportunities	Opportunity to create socio-ecological value for a local community (and for growth and specific opportunity)
- as family business	Low agency costs	Low agency costs and to care for family	Care for humanity
Four steps of the entrepreneurial process			
Step 1: Identify an opportunity, based on:	Seek financial value capture	Seek financial value capture via reducing negative externalities	Seek value creation through positive socio-ecological externalities
Step 2: Test the idea	Gather information to test and refine the opportunity		
Step 3: Make a plan (business plan, and Entrepreneurial Start-Up Plan)	To convince stakeholders of profit potential	To justify the profitability of reducing targeted externality	To engage stake-holders in developing the key aspects of the organization
Step 4: Take action (qualities of entrepreneurs; key resources)	Access traditional sources of financing (e.g., banks, venture capitalist) and use it to mobilize the other resources called for in the plan	Access new and/or traditional sources of financing, and use it to mobilize the other resources called for in the plan	Consider newer sources of financing (e.g., crowdfunding) to get started, and then work with stakeholders to mobilize the resources to run the organization

CHAPTER 6:
THE ENTREPRENEURSHIP PROCESS

Learning goals

After reading this chapter, you should be able to:

1. Identify the contributions entrepreneurs make to society.

2. Explain how entrepreneurship is similar to and different from family business and small business.

3. Describe the four main steps in the entrepreneurial process.

4. Identify and describe the elements of a business plan and of an Entrepreneurial Start-Up Plan (ESUP).

STARTING A NOBLE, NOBEL-PRIZE-WINNING BANK

Can you imagine the Nobel Peace Prize being awarded to an entrepreneur and manager of a bank? That's exactly what happened in 2006, when the Prize was awarded to Mohammad Yunus and the Grameen Bank.[1] His story[2] starts in 1974, when an estimated 1.5 million people in Bangladesh died in a famine.[3]

Step 1: Identify an opportunity (problem to solve). *"I was teaching economics at that time, at the University, and I felt terrible. Here I was, teaching the elegant theories of economics in the classroom with all the enthusiasm of a brand-new Ph.D. from the United States. You feel as if you know everything. You have the solutions. But you walk out of the classroom and see skeletons all around you, people waiting to die. …*

I wanted to find out, is there anything I can do as a human being to delay it, to stop it, even for one single person? I would go around and sit down with people in the village, talking … I learned many things along the way, and tried to involve myself in whatever capacity I could to resolve those kinds of problems.

One particular incident took me in a new direction. I met a woman who was making bamboo stools. After a long discussion I found out that she made only two pennies U.S. each day, and I couldn't believe anybody could work so hard and make such beautiful bamboo stools and make such a tiny amount of profit. So I tried to understand. She explained to me that she didn't have the money to buy the bamboo to make the stools, so she had to borrow from the trader—and the trader imposed the condition that she had to sell the product to him alone, at a price that he decided … she was virtually in bonded labor to this person. And how much did the bamboo cost? She said, 'Oh, about 20 cents.'" …

Step 2: Test the idea. *"I debated whether I should give her 20 cents, but then I came up with another idea -- let me make a list of people who needed that kind of money. I took a student of mine and we went around the village for several days and came up with a list of 42 such people. When I added up the total amount they needed, I got the biggest shock of my life: it added up to 27 dollars! …*

I took the money out of my pocket and gave it to my student. I said: 'You take this money and give it to those 42 people that we met and tell them this is a loan, that they can pay me back whenever they are able to. In the meantime, they can sell their product wherever they can get a good price.'"

"After receiving the money, they were excited. And seeing that excitement made me think: 'What do I do now?' I thought of the bank branch which was located on the campus of the University. I went to the manager and suggested that he lend money to the poor people that I had met in the village. … He said, 'You are crazy. It's impossible. How could we lend money to poor people? They are not credit-worthy. … They cannot offer collateral, and such a tiny amount is not worth lending.' He suggested that I see the high officials in the banking hierarchy in Bangladesh.

I took his advice and went to the people who matter in the banking sector. Everybody told me the same thing. Finally, after several days of running around I offered myself as a guarantor. I'll guarantee the loan, I'll sign whatever they wanted me to sign, but they can give the money, and I'll give it to the people that I want to.

So that was the beginning. They warned me repeatedly that the poor people who receive the money will never pay back. I said, 'I'll take a chance.' And the surprising thing was, they repaid me every penny -- there was not a single penny missing. I got very excited and came to the manager and said, "Look, they paid back, so there's no problem." But he said, 'Oh, no, they're just fooling you. Soon they will take more money and never pay you back.' So I gave them more money, and they paid back. I told this to him, but he said, 'Well, maybe you can do it in one village, but if you do it in two villages it won't work.' So I hurriedly did it in two villages [and eventually 50 villages] -- and it worked.

… I came up with the results they cannot deny because it's their money I'm giving, but they will not accept it because they are trained to believe that poor people are not reliable. Luckily, I was not trained that way so I could believe whatever I am seeing, as it revealed itself. But their minds, their eyes were blinded by the knowledge they had.

Step 3: Develop a plan. *Finally I had the thought: why am I trying to convince them? I am totally convinced that poor people can take money and pay back. Why don't we set up a separate bank? That excited me, and I wrote down the proposal and went to the government to get the permission to set up the bank. It took me two years to convince the government. …"*

Step 4: Take action. *"On October 2, 1983, we became a bank. A formal bank, independent … now that we had our own bank and we could expand as we wished. And we did expand.*

We reached the first billion dollars in [1994], and we celebrated it. A bank that started its journey with 27 dollars, giving loans to 42 people, coming all the way to the billion dollars in loans, is a cause for celebration we thought. And we felt good. Nobody had believed in us, everybody said, well, you can give tiny amounts to tiny people -- so what? You cannot expand, you cannot reach out to the poor people. So coming all the way to the billion dollars in loans to so many borrowers was quite an excitement."

When it received the 2006 Nobel Peace Prize, Grameen had almost 7 million borrowers (95% of them women[4]), 18,795 employees in 2,225 branches[5] working in 71,371 villages, and since its inception had disbursed over US$5.7 billion to help people escape poverty. Its loan recovery rate is 98.85% (versus an 80% average for most banks[6]). Grameen has been profitable almost every year. The compelling idea of loaning money to the world's poorest micropreneurs to enable them to grow their businesses has had a life-changing impact. Yunus notes that 58% of the poor people who have borrowed from Grameen have managed to escape poverty.[7]

While the rest of this book focuses on management issues that are relevant for any type of *existing* organization, this chapter starts with a brief description of hallmarks of entrepreneurial *start-ups*, including small and family-run organizations. We then focus on the four-step entrepreneurial process that results in the creation of new organizations. This includes the development of business plans and Entrepreneurial Start-Up Plans (ESUP), which serve to introduce some of the key content found in the rest of the book. As always, we contrast and compare implications for different approaches to management: Financial Bottom Line (FBL), Triple Bottom Line (TBL), and Social and Ecological Thought (SET).

THE IMPORTANCE OF ENTREPRENEURSHIP

Recall from Chapter 1 that an **entrepreneur** is *someone who conceives of new or improved goods or services and exhibits the initiative to develop that idea by making plans and mobilizing the necessary resources to convert the idea into reality.* The most familiar type of entrepreneurs, and the focus of this chapter, are the so-called classic entrepreneurs, who start new organizations to pursue their ideas.[8] Almost every organization you know (e.g., Tesla, Microsoft, Fed-Ex, the pizza place down the street) had an entrepreneurial beginning, and such new organizations are vitally important, especially in terms of creating new jobs. For example, over the past 40 years in the United States new organizations have created an average of 3 million jobs per year, while existing firms have actually reduced the number of jobs by an average of 1 million jobs per.[9] In other words, the only reason that the U.S. had job growth in the past 40 years was because classic entrepreneurs were creating new jobs at a faster rate than existing firms were eliminating them through downsizing and offshoring. The same pattern can be observed all over the world; new businesses are the source of most new jobs.[10] The Global Entrepreneurship Monitor (GEM), an ongoing international study that conducts more than 200,000 interviews annually in over 100 countries, found that in 2016 more than half of new businesses throughout the world planned to hire additional staff in the near future.[11]

Entrepreneurial start-ups are also important for the innovations they provide to society. Research shows that as organizations grow older, they are less likely to develop innovative solutions.[12] As illustrated in the opening case, older organizations are less likely to even notice new or emerging problems, and when they do, they typically try to solve those problems using existing practices and technologies. Radical new solutions are more likely to come from new organizations. In fact, more than half of all innovations—and 95% of radical, industry changing innovations—come from entrepreneurs.[13] This phenomenon, of new entrepreneurial organizations leading the way for older ones, may help to explain why young people feel drawn toward entrepreneurship. In a recent survey, 70% of Millennials reported that they expected their careers to include working independently to create something new[14] (the global average across all age groups is 22%).[15]

More than half of all innovations—and 95% of radical, industry changing innovations—come from entrepreneurs.

ENTREPRENEURSHIP AND SMALL BUSINESS

The terms "entrepreneur" and "small business manager" are often used interchangeably, because most entrepreneurs are also small business managers. Nonetheless, some entrepreneurs manage large businesses (e.g., Tesla, Grameen Bank), and not all small business managers are entrepreneurs (e.g., the manager of the local hardware store who inherited it from her parents may not be an entrepreneur). Entrepreneurial organizations are distinguished by doing something new, whereas small- and medium-sized enterprises (SMEs) are defined by their size, not on the basis of whether they have done something new. Many criteria can be used to judge an organization's size (e.g., revenue, assets, ownership structure), but the most commonly used criterion is the number of employees. Governments such as those in Canada, the United States, and the European Union define a small organization as one with fewer than 100 employees, and a medium-sized organization as one having from 100 to 500 employees.

Because of their size, SMEs have important differences that distinguish them from large organizations. For one, SMEs have smaller budgets, so any fixed costs of operation will be relatively large and thus a greater burden. **Fixed costs** *are business expenses that do not vary with the quantity of organizational output* (e.g., the rent payments for a coffee shop are the same, no matter how many coffees it sells). As well, SMEs have fewer resources to compete with other organizations, such as offering high wages and promotions for employees, or marketing budgets for attracting customers. In addition, SME operations often are not large enough to benefit from economies of scale. **Economies of scale** *are cost savings that arise from producing a large volume of output.* For example, mass production of automobiles along an assembly line leads to a much lower cost per car than does building individual autos in small numbers. SMEs also have fewer options to buffer economic downturns; their limited internal resources often lead to lower credit ratings and less access to external resources, and their small number of employees and smaller operations mean that SMEs are generally less diverse, both in their operations and in their staff. These differences combine to create two important effects. First, SMEs are far more common in service industries than in manufacturing (e.g., more than 75% of small businesses in Canada provide services, rather than goods).[16] Second, SMEs suffer from the **liability of smallness**, *which refers to small organizations' greater chance of failing compared to larger organizations in the same industry or situation*.[17]

In addition, entrepreneurs starting small businesses will also suffer from the **liability of newness**, *which refers to new organizations' greater chance of failing compared to older organizations in the same industry or situation*. Older organizations have established reputations and past successes. Their members have had the chance to develop routines and adjust to their work. All of these features make older organizations more resilient and better able to secure resources from the environment. Indeed, research suggests that 20% of new businesses fail within the first year of operation, and 50% within the first five years of founding.[18]

Employees in small and medium-sized businesses have higher job satisfaction, better working conditions, and more meaningful jobs.

Despite these challenges, SMEs are the core of most national economies. For example, in Canada, 98% of all businesses have fewer than 100 employees, and those small organizations employ 8.2 million people, which is more than 70% of all private (non-government) jobs in the country.[19] Small- and medium-sized businesses combined represent 99.9% of all firms in Canada, and they are of comparable importance in other countries as well (e.g., 97% or more in Australia, Belgium, Chile, Japan, New Zealand, Thailand, and the United States).

SMEs not only create jobs, they also tend to create jobs with enhanced social well-being. Surveys suggest that employees in SMEs have higher job satisfaction, better working conditions, more control at work, and less desire to quit.[20] Small businesses also may offer employees the opportunity to develop and use a wider variety of skills, and the ability to see more clearly how their work relates to the organization's mission and outcomes.[21] Both of these opportunities tend to make jobs more satisfying and meaningful.[22]

ENTREPRENEURSHIP AND FAMILY BUSINESS

As with SMEs, the idea of a family business is sometimes confused with entrepreneurship, because it is not unusual for start-ups to be managed by a family. Nonetheless, family business and entrepreneurship are two distinct ideas. This is illustrated by the fact that many family-controlled organizations are long past the start-up phase (e.g., Samsung, Walmart, Nike, and Mars). A **family business** *is an organization controlled by two or more members of a single family, in cooperation or in succession*. A **family** *is a group of people—typically connected by marriage or kinship ties—who have a shared history, who feel a sense of collective belonging, and who are committed to helping each other build a shared future*. For example, if one spouse manages a restaurant while the other handles accounting and inventory, that restaurant is a family business, as is one where an entrepreneur retires and passes control of her organization to her children. Spouses, siblings, and children are the family members most commonly involved, but some family businesses also include in-laws, cousins, and more distant relations.[23]

A hallmark of family business is the strong interpersonal relationships associated with being family members. When making business decisions, family members will think about their family as well as the organization, and issues in the family may influence how members interact. These facts create distinctive advantages and disadvantages.[24]

Family businesses enjoy at least three advantages. First, family members are often highly motivated to see the organization succeed. They may be willing to stay with a troubled firm or to make sacrifices for its benefit in order to safeguard the future of their family. Second, being a family firm can help in attracting customers and partners, as "family owned and operated" advertising is often taken to mean that stakeholders will receive better, kinder treatment from the organization.[25] Third, the higher levels of trust and cooperation in families can simplify management and reduce the financial costs of control. In particular, family firms have lower agency costs than non-family

Members of a family business willingly make sacrifices to benefit the firm.

firms.

Agency costs *refer to the expenses that owners pay to ensure that managers act in the interests of the firm, rather than in their own self-interest.* Agency theory uses the term **moral hazard** *to describe the risk that managers may use the firm's resources to benefit other interests to the detriment of the owners' financial gain.* Moral hazard arises when two conditions are met: (1) managers and owners have misaligned incentives such that managers are rewarded for organizational outcomes that the owners do not favor, and (2) there is information asymmetry between managers and owners such that owners have trouble evaluating the performance and choices of managers due to the fact that managers know more about organizational operations and can control what information is shared with owners. Because managers in family businesses are often family members, these firms will generally have lower levels of misaligned incentives and information asymmetry, and thus lower agency costs.[26]

However, family businesses also must confront some disadvantages. If success requires sacrifices (e.g., high debt, long hours), members may believe that the business is being placed ahead of the family, decreasing the quality of relationships within the family. Interpersonal conflict in the family may also influence the business. For example, if a married couple start an organization and then get divorced, the business may be torn apart. The two brothers who started the Dassler Brothers Shoe Company, Adi and Rudy, had a serious conflict with each other, and their wives did not get along. So the brothers divided their company, and Adi started Adidas, and Rudy started Puma. Their continued fighting with each other distracted them from the threat of a new start-up named Nike.[27]

Moreover, how one treats family members may not always fit with how one treats business partners. If a family business includes two children, but one of those children is clearly more motivated or more competent, how should rewards be distributed? The issue of rewards and performance reviews is also complicated for non-family employees. It is easy for managers to be biased in favor of their family members, and even when they are not, employees may believe such favoritism exists. And if operations go badly, so that the owner has to choose between firing a child or the best salesperson in the firm, either choice can have serious consequences. **Nepotism** *refers to preferential treatment of relatives and friends, especially by giving them jobs for which they are not the most qualified.* While nepotism is typically not illegal, it is often seen as unfair, and can frequently be a poor business choice. Nonetheless, nepotism is not unusual in family businesses, and often trumps other decision-making criteria.

If a family business includes two children, but one of those children is clearly more motivated or more competent, how should rewards be distributed?

FBL, TBL, AND SET MANAGEMENT IMPLICATIONS

FBL, TBL, and SET approaches to entrepreneurship have important differences. FBL entrepreneurs are most concerned with financial returns, and so are most likely to be concerned with how new ventures contribute to economic activity and growth. Small businesses may be especially attractive to them because their small budgets can produce relatively high rates of return. Likewise, with regard to family business, FBL entrepreneurs are likely to value the reduced agency costs, the potential for low labor costs during the early years, and the ability to provide family members with relatively high pay after the firm has become a financial success.

The TBL approach, in addition to job creation, will celebrate the fact that jobs created by entrepreneurs are more satisfying, making employees more willing to stay, even when they are paid less than in large firms. With regard to small business, a TBL perspective will highlight similar advantages to FBL, with the addition that small businesses can target small, specific ways to profitably reduce a negative externality. For example, Tom Szaky founded Terracycle after he discovered that he could profitably take waste from the kitchen at the university where he was a student, feed that waste to worms, and sell the worms' excrement in used soda bottles as plant fertilizer.[28] The TBL view of family business is also similar to that of FBL entrepreneurs, but with more recognition of opportunities to bring family members closer together and to take care of the next generation.[29]

From a SET perspective, perhaps the most important benefit of entrepreneurship is its potential for creating positive socio-ecological innovations.

From a SET perspective, perhaps the most important benefit of entrepreneurship is its potential for creating positive socio-ecological innovations. With regard to the advantages of a small business, a SET view would share the FBL and TBL interest in low start-up costs and the ability to adopt a narrowly focused strategy, but also value the greater connection that small businesses often have with their surroundings. If a small business is focused on local stakeholders, it contributes to the local multiplier effect, and reduces GHG-emitting travel. In terms of family business, SET entrepreneurs may often adopt a broader view, focusing on not just their own family, but on humanity or the world as a whole. For example, some SET entrepreneurs have created so-called "universal family firms" that take care of employees and other stakeholders as though they were family members.[30]

The Four-Step Entrepreneurial Process

Progressing from the initial inspiration for a new a product or service all the way through to developing and managing an organization which offers that product or service can be a long, complex, and difficult process. Nonetheless, it is useful to think of that process as having four basic steps. Each step is described below.

STEP 1: IDENTIFY AN OPPORTUNITY

The essential first step in entrepreneurship is to identify an opportunity to pursue. **Opportunity identification** *is the process of selecting promising entrepreneurial ideas for further development.* Many people mistakenly believe that the challenge of entrepreneurship is coming up with ideas for new products or services, but the greater challenge is actually in identifying *good ideas*, that is, ideas that fit a genuine opportunity or need in the marketplace. If you have ever seen a goofy or unsuccessful product in a discount store or on a shopping channel, or watched *Dragon's Den* or *Shark Tank*, then you know that not all entrepreneurial ideas are equally good.

Sometimes the entrepreneurial opportunity involves purchasing an existing organization. This might be an opportunity to purchase a franchise for a given location, which allows an entrepreneur to acquire everything that is necessary to open an organization affiliated with a larger brand (e.g., McDonald's, Lululemon, Ten Thousand Villages). At other times, the entrepreneurial opportunity involves purchasing an organization that is already operating, rather than starting from nothing. It can be especially rewarding to purchase an existing business that is underperforming and use one's creativity and energy to make it successful.

However, the most common entrepreneurial opportunities involve starting an entirely new organization, and doing that requires identifying a new product or service opportunity. Having an entrepreneurial mindset, which enables entrepreneurs to look at situations in new ways, is one of the most important factors in identifying such opportunities.[31] For example, while others didn't, the founders of *31 bits* saw an opportunity to set up a business to help single mothers in Uganda. Consider a simple experiment. One class of school children was shown a picture of a person in a wheelchair and asked, "Can this person drive a car?" The students all answered "no," and gave many reasons why not. But when another class was shown the same picture and asked, "How can this person drive a car?" the students generated many creative ideas to help a person who uses a wheelchair to drive a car.[32]

An entrepreneurial mindset is a distinct way of seeing and asking questions.

Entrepreneurs are more likely to consider how something can be accomplished, rather than thinking of reasons why it can't be done. This orientation can be applied on a relatively small scale, such as realizing that a specific market has an unmet need (e.g., there is no fusion restaurant in the neighborhood). Or it can be applied on a large scale, requiring the entrepreneur to create the market as well as the organization. When the founders of Manitoba Harvest Hemp Foods had the idea to sell hemp seed as a health food in North America, there was no demand or supply for their product. They had to lobby the government for permission (growing hemp was previously illegal), source the seeds by teaching and encouraging farmers to grow the plants, develop machinery to extract and process hemp seed, conduct research to show its health benefits, and motivate consumers to buy the product. After a number of years Manitoba Harvest had 66% of the North American hemp seed market.[33]

In terms of where the opportunities come from, there are several areas where entrepreneurs may search for possibilities (see Table 6.1). One useful way to identify potential entrepreneurial opportunities is to consider the three types of well-being (described in Chapters 3-5) and the idea of creating positive externalities while reducing negative externalities. All entrepreneurs have to consider financial outcomes; FBL and TBL organizations seek to maximize them for the organization, while SET organizations have to at least maintain financial viability. But different management approaches pay differing amounts of attention to social and ecological outcomes. As a result, different types of entrepreneurs will focus on different kinds of opportunities.

Table 6.1 Sources of potential opportunities

Source	Examples
Trends: large-scale, ongoing patterns	Aging population, increasing wireless bandwidth and access, growth of terrorism
Industry changes	Rise of preventative medicine, real estate bubbles or crashes, legalization of marijuana
Unexpected events	Global recession of 2008, Brexit decision
Gaps: demands and needs that are not being met in the best way	Microfinance, crowdfunding, self-publishing, and music downloading arose in large part because customers were dissatisfied with previous distribution models
Personal experience	Ideas may come from travelling in other countries, work experiences, talking with friends and family, becoming aware of problems people are facing, and from hobbies and other interests.

The FBL, TBL, and SET approaches to opportunity identification

FBL entrepreneurs are constantly looking for more financially rewarding ways to meet needs and wants. They look for places where they can out-perform existing competitors, either by lowering financial costs or by providing unique added-value. They look for opportunities to invest resources that will yield a higher financial return than they currently earn. FBL entrepreneurial opportunities may focus on reducing a firm's operating costs, even if it increases negative social or ecological externalities, because such issues do not concern FBL entrepreneurs (they assume that other parties, such as government, are responsible for addressing issues related to externalities). For example, FBL entrepreneurs may increase their financial value capture by outsourcing production to low-paying overseas factories, despite the local job losses and the poor working conditions overseas.

TBL entrepreneurs also seek maximum financial return, but with a focus on opportunities to profitably reduce social and ecological externalities. TBL opportunities are increasing thanks to consumers' growing support for organizations that are more socially and ecologically responsible. For example, firms in the oil and gas industry are notorious for their GHG emissions (negative ecological externalities), even though they also create high-paying jobs for their employees and affordable energy for their customers (positive social externalities). TBL firms can enhance their corporate reputation by developing technologies that reduce GHG emissions during the extraction of oil from the oil sands (reduce negative ecological externalities).

SET entrepreneurs look for viable opportunities to increase social or ecological well-being. In addition to achieving sustainable financial returns, they are seeking ways to improve employment opportunities for the marginalized of society or new ways of caring for the environment. An example is BUILD, a company that creates positive societal externalities by hiring chronically unemployed people like ex-convicts, and that minimizes negative ecological externalities by installing energy-efficient toilets and insulation for homeowners.[34] The SET approach represents a different way of entrepreneurial "seeing" than the FBL and TBL approaches. Before the Grameen Bank, FBL and TBL managers in the financial industry did not see the opportunity in microfinancing, but Mohammed Yunus saw it as a way to help poor entrepreneurs in Bangladesh. Also, SET entrepreneurs emphasize opportunities that meet needs, rather than creating or meeting wants. Sometimes SET entrepreneurs even try to eliminate the need for their product or service. For example, the Digger Foundation supports the design of machinery to remove land-mines with the goal of all land-mines being eliminated so there is no need for their equipment.[35] Similarly, Yunus is looking forward to eliminating poverty, and thereby eliminating the need to provide loans to impoverished people.

Sometimes SET entrepreneurs try to eliminate the need for their product or service.

STEP 2: TEST THE IDEA

The second step in the entrepreneurial process is to test your idea to determine whether it is a viable opportunity. This usually involves talking about your idea with potential customers, employees, suppliers, and other stakeholders, as well as developing a prototype or conducting a pilot test. In the case of the Grameen Bank, Mohammed Yunus did both of these things, by talking to and learning from potential clients and from others in the financial services industry, and by actually providing small loans to micro-entrepreneurs in the neighborhood. These actions let him know that his idea could work.

The most important feedback for entrepreneurs will come from potential users of the good or service (i.e., future customers), but useful information can also be gained from industry experts, government officials, suppliers, competitors, community members, and potential employees. One of the best ways to get this feedback is by using a preliminary **elevator pitch**, *which is a succinct description of the entrepreneur's plan and the value it offers.* A good elevator pitch focuses on the potential opportunity—what need the entrepreneur is satisfying, how the need will be met, and the benefits of doing so. The elevator pitch must be brief and focused on the most important details. It should:

- Identify the problem you propose to address
- Describe your proposed solution (if appropriate, include a prototype or beta-version)
- Recognize the major challenge or obstacle
- Have a solution for the challenge
- Explain how your plan benefits the customer
- Be 30 to 60 seconds long
- Be focused, clear, and delivered in a compelling and enthusiastic fashion.[36]

The most effective pitches and ideas will be persuasive, which means they will change the audience's thinking or motivate them to take some action. Therefore, the pitch must have a goal. For example, if an entrepreneur is giving her first pitch to a potential customer, then the goal is to see if the individual becomes excited and asks for more information. Sharing your pitch with stakeholders will allow you to judge others' reactions and revise your goals accordingly. For example, talking with customers may help you to identify important product features that you overlooked. Talking to potential employees can identify production issues before they become problems. Entrepreneurs should use an iterative approach in which they give their pitch, listen to the reaction, revise their pitch, and then try it again with another stakeholder.[37] The goal is not to have a refined end-product, but rather to determine whether your idea has merit and potential.

The FBL, TBL, and SET approaches to testing the idea

The FBL approach to idea testing focuses on financial data, such as the size of the market, price points, and production costs. The TBL approach includes these concerns, but also focuses on identifying a particular negative socio-ecological externality that can be profitably addressed. The SET approach focuses on soliciting feedback from the widest array of stakeholders, and is most likely to welcome input from stakeholders to co-develop the idea. Recall how Yunus consulted with many people in his village, as well as bankers and government officials before beginning. Similarly, Dan Wiens held multiple focus groups before beginning his subscription farming venture (Chapter 4).

STEP 3: DEVELOP A PLAN

Once an entrepreneurial opportunity has been identified and tested, the next step in the entrepreneurial process is to develop a written plan that provides clear direction by laying out objectives and the strategies that will be used to reach those objectives.[38] Experience and extensive research evidence show that entrepreneurs are more likely to reach their goals if they have a sound plan.[39] First, the plan ensures that entrepreneurs think through the different aspects of the new venture before they begin. Once a new venture is started, the demands of running the organization leave little time for such reflection. Second, preparing a plan forces entrepreneurs to establish goals and standards for subsequently measuring performance. For example, an entrepreneur may decide that a new venture should generate at least $200,000 in revenue in the first year of operation, or have a positive cash-flow within two years. If such milestones are not met, then the entrepreneur may leave the venture, rather than investing any more resources in it. Finally, perhaps the most important reason to write a well-developed plan is to win the support of other stakeholders, whether it is financers, suppliers, employees, or customers.

Perhaps the most important reason to write a well-developed plan is to win the support of other stakeholders, whether it is financers, suppliers, employees, or customers.

Table 6.2 (next page) provides a summary of a generic business plan to describe a potential new organization.[40] A **business plan** *is a written document that describes the key features, actions, structure, and systems for a proposed new organization that is designed to take advantage of an entrepreneurial opportunity*. As used here, the term business plan can be applied to a wide range of new ventures, not just for-profit businesses. The Entrepreneurial Start-Up Plan (ESUP) introduced in Chapter 1 is a subset of a business plan. An ESUP includes the elements of a business plan that are relevant for general management (especially those covered in the first five parts in Table 6.2), but does not focus on aspects related to specific functional areas like marketing, finance, and operations. This book provides the necessary information to develop an ESUP, but to develop a full business plan you will need to find additional sources of information. For example, if you are a student using this book as a text in a management course, then you may gain the additional material from your other courses (e.g., marketing, operations, accounting, finance, etc.). If you are an entrepreneur, topic areas outside this book are ones for which you may find other individuals who can bring that expertise to your management team (e.g., marketer, accountant).

Table 6.2 Elements of a generic business plan (and the 5 elements of an ESUP*)

Business plan element	Content	Discussed in book chapter
1. Summary*	Executive summary of the whole plan, highlighting key points and exciting the reader (1 page; related to elevator pitch)	6
2. Description of the new venture*	Opportunity being pursued (e.g., relevant trends); Target customers, size of market; Mission and vision; Business strategy; Legal form	3, 4, 5; 6 8, 9 9, 10 6
3. Description of product and competitors*	Key features of products/services Analysis of competition (competing and substitute products/ services, competitive advantage, SWOT analysis, stakeholder maps)	6 9, 10
4. Management*	Top Management Team (qualifications, roles); Organization structure and systems	13, 16 11, 12, 19
5. Staffing*	Details about employees – numbers, required skills, recruiting, training, compensation	13, 17
6. Marketing	Total and served available market, target market; Marketing plan, selling approach, customer retention methods, distribution, pricing	6
7. Operations	Location, facilities, equipment, methods, quality control, inventory management, suppliers, purchasing	
8. Finances	Financial requirements, sources, projected revenues and costs, break-even analysis, cash flow	
9. Timeline and contingency plans	Goals and milestones, achievements by dates, insurance, liability considerations	

Note that the order and components of the plan in Table 6.2 are merely suggestive; when writing a business plan it is best to allow characteristics of the specific new venture to help shape the structure of the business plan. Specific organizations may emphasize some elements more than others (e.g., location is essential for a retail shop, but less important for an online consulting firm) and different audiences may be more interested in some elements (e.g., potential employees may care most about human resource policies). Nonetheless, Table 6.2 provides a checklist of the elements that should be considered for any business plan. We will briefly describe each element in turn.

Note that it may be appropriate for entrepreneurs to change the order and components listed in Table 6.2.

1. Summary of the plan

The summary is your chance to make a positive first impression. Think of the summary as a written version of your elevator pitch. If your summary is bland or dull, potential investors are unlikely to read the rest of your plan. The summary should provide a brief but engaging description of your new venture, the product or service it will provide, a description of the market it will operate in, the key features that are likely to make it succeed, the resources that are already in place, the additional resources that may be needed, and an appraisal of the venture's expected performance (financial, social, and ecological). The summary should be short—no longer than one or two pages—and should be written after all parts of the plan are complete.

2. Description of the new venture

This section of the plan introduces readers to the concept of the new venture; it has five components: a) the opportunity that is being pursued, b) the target market, c) the mission and vision, d) the business strategy, and e) the legal form of the new organization.

The opportunity. This element describes the problem or opportunity that the new venture is addressing, and the relevant trends or gaps in the larger environment that have given rise to the opportunity. This includes the elements of economic, social, and ecological well-being described in Chapters 3-5.

Target market. The business plan should describe the characteristics and size of your target market (and thus the potential size of the new venture). In this context, a **market** *is the group of people or organizations that are, or could be, interested in in using your particular product or service*. For example, if you are proposing a new daycare, you would include information on things like the number of children who need but do not have access to daycare, the socio-economic status of parents, the length of waiting lists at other daycares in the neighborhood, and the price parents are willing to pay for daycare. To understand the target market, entrepreneurs can refer to the information they collected in the second step of the entrepreneurial process, as well as gather additional information from potential customers, suppliers, partners, and competitors (see Marketing in section #6 below).

Mission and vision. As will be discussed in Chapters 8 and 9, this section describes the on-going purpose of the organization, as well as your vision of what the organization will look like in 5 years.

Business strategy. As will be discussed Chapters 8 and 9, this section describes whether the new venture's strategy is based on having low financial costs, distinct features, minimal negative externalities and/or enhanced socio-ecological well-being.

Legal form.[41] There are many different legal forms an organization can take, but four basic ones are sole proprietorships, partnerships, corporations, and co-operatives. A

sole proprietorship *is a business that is owned and operated by one entrepreneur who is responsible for all of its debts*. Because they are simple to start, most new ventures are sole proprietorships.

A **partnership** *is established when two or more entrepreneurs own and operate the firm and are responsible for all of its debts.* Partnerships are also simple to start and have the advantage of adding more expertise and resources to a firm. Having a written agreement about ownership, dispute resolution, and related issues prior to starting is crucial for success.

A **corporation** *is a legal entity separate from its owners that has many of the legal rights of a person and limits the financial liability of the owners to the amount of their investment in the corporation.* Corporations are owned by shareholders, who in turn elect the board of directors that oversees and takes legal action for a firm. Corporations are costlier to start and operate due to numerous government regulations, but they offer advantages of limited liability and greater continuity over time. New corporations usually start as private corporations (where shares cannot generally be bought by the general public).

Finally, a **co-operative** *is jointly owned and run by its owners, primarily to provide goods and services for their own benefit.* In a co-operative ("co-op") every owner gets one vote to elect the board (i.e., owners can purchase only one share each), and one usually can't be part of the organization without owning a share. There are co-ops in all industries and fields, such as consumer goods (e.g., Mountain Equipment Co-op), financial services (e.g., credit unions), and housing (e.g., condominium owner's associations).

3. Description of product and competitors

This section of the plan describes the products and services the new venture will offer (including key features and price points), and how they fit into the larger market. This involves drawing stakeholder maps, describing similar products and services being offered in the marketplace, and providing an analysis of the new venture's strengths, weaknesses, opportunities, and threats (see Chapters 9 and 10).

4. Management

This section describes your top management team, your basic management philosophy or approach, and the organizational structure and systems of your new venture. It should convince readers that you have the management capability to make your new organization successful. Potential funders of a new venture place great emphasis on the characteristics of the entrepreneurs leading a new start-up, and particularly their ability to work as a cohesive team.[42]

Your start-up plan should describe the experience, expertise and philosophy of your management team.

Your start-up plan should provide a clear description of the management team's experience and expertise. Be sure you also specify which member will do which work (e.g., who will manage areas like finance, accounting, human resources, etc.). Identify any gaps and how you will access advisors and consultants to fill those gaps. You should also provide information about how much time and energy key people will invest in this venture and how they will be compensated. For example, which members are willing to put in 60 hours a week, and which have other jobs and commitments that will limit their participation?

In addition, this section should provide information on your basic management philosophy. This information will reflect whether you will adopt an FBL, TBL, or SET management approach, and it should include information about how your management approach and strategy fit with your organizational structure and systems (Chapters 11 and 12).

5. Staffing

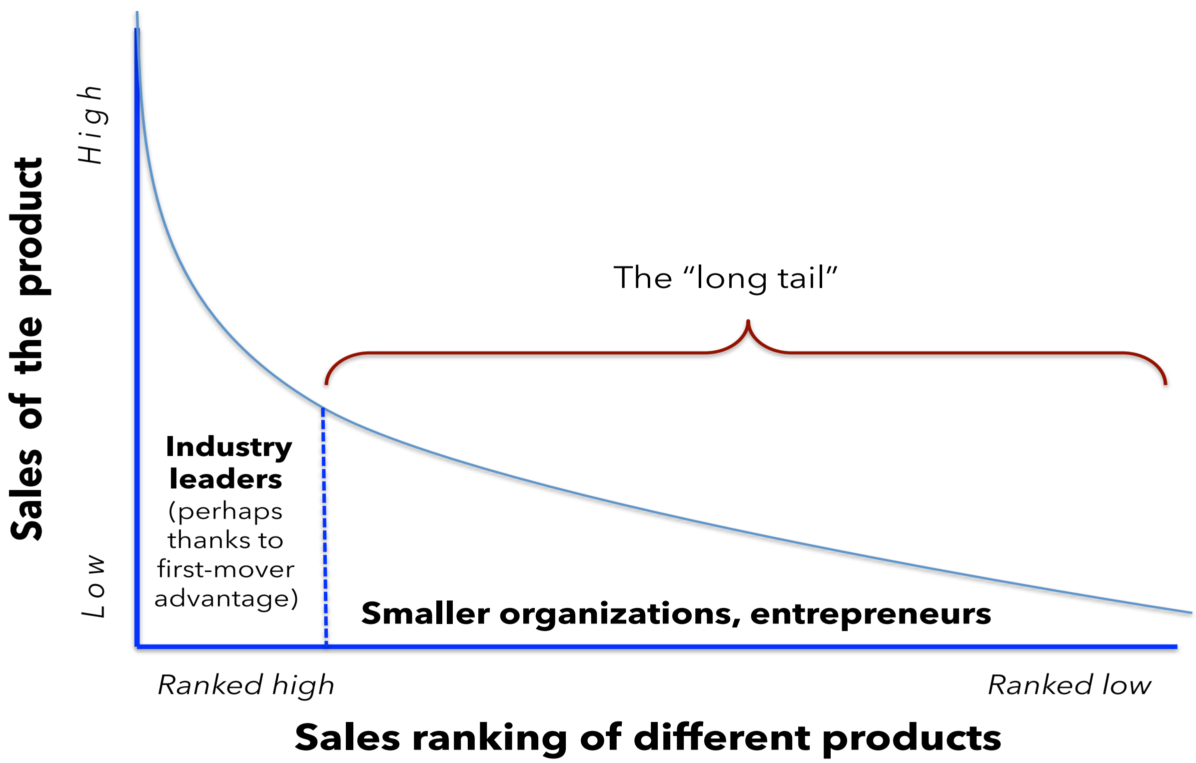
In addition to describing the top management team and organizational structure and systems, your plan should provide additional details about the number of employees you need, the sorts of skills and credentials required, how you will recruit, train, and compensate your employees, whether or not you will you promote from within, offer flexible work hours, focus on low-cost overseas service providers, and so on (Chapter 13).

6. Marketing

The marketing section provides detailed information about three key components of the market: TAM, SAM, and your target market.[43] The **Total Available Market** (TAM) *includes everyone who could potentially benefit from the product or service*. The **Served Available Market** (SAM) *includes everyone in the TAM who is likely to actually use the product or service*. The **Target Market** *includes everyone in the SAM that the organization will intentionally try to make into a customer or client in the near future*. For example, if you were planning a new daycare, the TAM might include every household within a one-hour driving distance that has children living there. The SAM would include those households in the TAM that need, but do not currently have, daycare services. The target market would be the members of the TAM that your specific organization is going to prioritize as customers (e.g., full-time vs part-time care, children of particular ages, etc.).

This section also includes your marketing plan, selling approach, customer retention methods, distribution, pricing strategy, and so on. An important consideration is whether the new venture's products and services may be able to attain a **first-mover advantage**, *which is a performance advantage enjoyed by the first organization or product to reach a large portion of the potential market*. For example, the QWERTY keyboard is dominant not because it is better than other keyboards, but because it was first to be mass-produced (see Chapter 2). Growth-oriented entrepreneurs will be most concerned with first-mover advantage, because their goal is creating the largest possible organization. In contrast, micropreneurs are less concerned with increasing the size of their business and so are more likely to focus on what has become known as the "long tail" of the market.[44] Many markets are dominated by one or a few large organizations, but technology has allowed smaller organizations to reach enough customers to be viable (see Figure 6.1). The few large organizations that control the vast majority of the market are the 'head' of the market, but there can still be a large number of organizations in the 'tail' that each have a very small portion of the market. For example, J.K. Rowling's *Harry Potter* story is the world's best-selling book series, with more than 500 million copies sold.[45] However, publishers consider a fiction author successful if a book sells just 10 to 15 thousand copies.[46] Because current technology allows an entrepreneur to potentially reach customers all over the world, there are opportunities for many organizations in the long tail of the market, not just large first-movers in the head.

Figure 6.1: The head and long tail of the market



7. Operations

This section provides detailed information about the new venture's proposed location, facilities, equipment, methods of transforming inputs into outputs, quality control, inventory management, suppliers, purchasing strategies, and so on. For example, if you are starting a daycare, you need to identify potential sites for the daycare, the available parking facilities, convenience for parents who are picking up and dropping off their children, property taxes, zoning regulations, required liability insurance coverage, whether the site is located close to parks and libraries, the curriculum you will follow, and the supplies and equipment you will need (e.g., crayons, paper, floor mats, outdoor/indoor climbing structures, and so on).

8. Finances

This section should describe the anticipated sources of financing, financial projections for the first five years, an analysis of expected expenses and revenues, a break-even analysis, and cash flow statements. The projections should be relatively detailed at first (e.g., provide quarterly cash-flow projections in the first year) and then more general over time. An important part of the financial planning for the organization is to identify its sources of financing and specify when these funds are needed. Unless entrepreneurs are self-financed, they usually need either debt or equity financing. **Debt financing** *occurs when entrepreneurs borrow money from a bank, family and friends, or a financial institution that must be paid back at some future date*. Collateral such as personal assets or business assets is often required to guarantee a loan. **Equity financing** *occurs when investors in a new venture receive shares and become part owners of the organization*. Equity financing usually comes from **venture capitalists**, *which are companies or individuals that invest money in an organization in exchange for a share of the ownership and profits*. Venture capitalists often become quite involved in the operations of the business, sometimes even requiring that they approve major decisions.

9. Timeline and contingency plans

This section of the plan describes how resources will be mobilized over time, presents expected performance milestones, and identifies contingency plans that will be put in place in case events do not unfold as planned. In terms of the time-line, the business plan should present a timetable or chart to indicate when each phase of the venture is to be completed. For example, for a new daycare organization the time-line should indicate when a location will be selected, when equipment will be installed, when and what kind of advertising will be done, when different staff members will be recruited and hired, and so on. The time-line should also identify specific milestones that are designed to help the entrepreneurs and investors know how well they are doing. For example, if a new daycare needs thirty children to be viable, and has only twenty children after two years of operation, then it may be prudent to close the daycare. The time-line should extend at least five years into the future.

Finally, the plan for the new venture should describe how critical risks will be managed if circumstances change. Competitors might engage in price-cutting, or there could be unexpected delays in development or cost over-runs, or difficulties might arise in acquiring timely inputs from suppliers. A new daycare may unexpectedly find a competitor starting up nearby three months later, or its staff may be accused of inappropriate behavior. Contingency planning helps managers to think beforehand how to handle these situations (see Chapter 8). The plan should also describe insurance mechanisms to deal with liability considerations. For example, the plan for a daycare would describe how it would deal with a parent who sues over an injury to their child.

How detailed should the plan be?

While it is essential for entrepreneurs to consider all of the issues described above, it has become less common to describe them all in exhaustive written detail.[47] A study of Inc. 500 firms (i.e., the 500 fast-growing private organizations in the United States) found that only 28% had completed a prototypical business plan at the start-up stage, and other research found no relationship between having a detailed new venture plan and future profitability.[48] The available research evidence suggests that the traditional business plan of clearly defining an opportunity and developing a detailed plan for execution tends to produce good outcomes for a new initiative in an established business (i.e., for intrapreneurship), whereas new organizations pursuing classic entrepreneurial ends may be better served by a more flexible, open-ended and partner-oriented approach to business planning.[49]

Just as asking the wrong question can limit an entrepreneur (e.g., "can a person in a wheelchair drive a car?" vs. "how could a person in a wheelchair drive a car?"), a detailed plan has the potential to limit what entrepreneurs do. For example, *31 bits* co-founder Kally Dovel first went to Uganda asking how to help children in orphanages, but soon learned it was more important to ask how she could help the single mothers who had placed their children in orphanages (see the Opening Case in Chapter 1). Similarly, a World Bank team was tasked with reducing famine by increasing milk production among farmers in rural Africa. However, when team members visited, they found that a bigger problem was spoilage of milk as it travelled from farmers to consumers. The team changed their goals as a result, in a way that may not have been possible if they had been set on executing the pre-conceived plan. As the team leader said, "I now realize how much of the overall success of the effort depends on people discovering for themselves what goals to set and what to do to achieve them."[50] A similar lesson is found in the description of Honda's entry to the U.S. motorcycle market (see Chapter 10).

Entrepreneurs with business plans are more than twice as likely to actually launch their new ventures.

However, one should not conclude that planning is unimportant. That belief would be wrong. According to one study, entrepreneurs with business plans are more than twice as likely to actually launch their new ventures.[51] Planning is essential for all entrepreneurs, but trying to make a complete and definitive plan prior to starting a new venture may have unintended negative effects. Rather, plans should only be as detailed as required to get underway, and they should be made (and revised) based on constant feedback and learning. As discussed earlier regarding elevator pitches, entrepreneurs should develop their plans iteratively: the current plan should be tested with real world data, seeing how customers or other stakeholders respond, and revised accordingly before being tested again.

FBL, TBL, and SET approaches to developing a plan

There are important differences in the content and the emphasis FBL, TBL, and SET entrepreneurs place on developing plans for a new venture. Highly detailed plans of the sort summarized in Table 6.2 have become less important in modern entrepreneurship,[52] though they continue to be important for some FBL entrepreneurs, because they provide a strong business case for investing.[53] Because the FBL approach prioritizes financial gains, developing a strong business case is crucial for gaining support, and FBL entrepreneurs place great emphasis on providing detailed information about potential customers and comparable firms' operating costs and similar data. This helps them to make concrete predictions about how much money could be made with the proposed new product or service.[54]

The TBL approach is very much like the FBL approach, but in some ways is even more demanding. Even though the TBL approach is becoming the new norm in the marketplace, TBL start-ups may face skepticism from traditional banks and investors because sustainable development has traditionally been seen as a threat to maximizing financial gains. Thus, a TBL entrepreneur must take extra care to reassure potential investors that resources devoted to reducing externalities will in fact enhance the organization's financial performance.

In contrast to traditional FBL and TBL plans, which are ultimately judged on whether or not they optimize the financial return, a SET organization will be judged on its ability to produce positive social or ecological outcomes in a financially sustainable fashion. Because the SET approach emphasizes multiple forms of well-being for multiple stakeholders through active cooperation with those stakeholders, a SET entrepreneur may be less able to anticipate and define everything in advance. As a result, SET entrepreneurs have often placed less emphasis on detailed and specific plans. One might say that whereas FBL and TBL entrepreneurs use a business plan to convince stakeholders to support them, SET entrepreneurs use stakeholders to develop a convincing plan.

Whereas FBL and TBL entrepreneurs use a business plan to convince stakeholders to support them, SET entrepreneurs use stakeholders to develop a convincing plan.

STEP 4: TAKE ACTION

The final step in the entrepreneurial process may be the most difficult. It is one thing to write an excellent plan, and it is another to implement it and launch a new organization. One study found that, even among plans that won at business plan competitions, only 30% of those plans were put into action.[55] There may be a variety of reasons for this. First, perhaps the prize-winners pursued an even better idea for a new start-up. Second, perhaps they did not have the entrepreneurial qualities called for to put their plans into action. Third, perhaps they were unable to find the necessary financial resources to launch their new organization (e.g., venture capitalists fund only 2% of the plans they see, and big banks approve only 23% of loan requests).[56] In any case, writing a great business plan and implementing it are two different things. The rest of this book describes the many issues and actions required to manage an organization, all of which must be addressed by entrepreneurs. In the remaining section here, we briefly describe entrepreneurial qualities that make a person more likely to take successful action, as well as differences among different approaches to financial issues.

Qualities of entrepreneurs

Studies suggest that a variety of qualities distinguish entrepreneurs who launch successful start-ups,[57] including personality characteristics like being conscientious, open to new experiences, extraverted, and emotionally stable.[58] A strong desire for achievement also contributes to entrepreneurial success, as does having a high level of ***self-efficacy***, *which is one's confidence and belief that they can accomplish a task successfully*.[59] Enjoying risk makes individuals more likely to start their own organizations, but it does not help them to succeed.[60]

Other important qualities include managerial social skills, such as leadership, the ability to communicate with others, and being able to build and maintain a cohesive team.[61] New venture success increases with the size of the founding management team.[62] Entrepreneurs working alone are far less likely to succeed, because a lone entrepreneur has fewer skills, fewer contacts, and less experience than a team.[63] Most investors consider the management team and their qualifications to be an essential criterion for providing financial support.[64] Education is also positively associated with entrepreneurial success;[65] and a lack of education is a primary barrier to acquiring start-up financing.[66] However, industry experience is a more important predictor.[67]

An important consideration is the entrepreneur's gender. Even in developed market economies, where we might expect to find fewer social barriers preventing female entrepreneurs, only 25% of businesses are owned and managed by women.[68] Several reasons may help to explain why women are less likely to become entrepreneurs. First, women tend to report lower self-efficacy than men[69]--even when they really have equal skill and knowledge[70]—and thus fewer women may choose an entrepreneurial career.[71] Second, investors seem biased in favor of male entrepreneurs.[72] Third, female entrepreneurs tend to choose different industries and locations for their organizations, and those choices are often in a lower profile and more challenging contexts.[73] Nonetheless, women have just as much entrepreneurial potential as men: studies show that when the barriers above are removed, women are just as likely as men to be successful entrepreneurs.[74]

In addition to personal attributes, individuals' life situations can also influence whether or not they take as action as entrepreneurs. First, people are more likely to start a new organization after experiencing a transition in their lives. This includes completing an education or training program, finishing a major project, moving, having a mid-life crisis, and being divorced or fired. For example, after their start-up PayPal was purchased by eBay, the founders went on to start other companies including Tesla Motors, LinkedIn, YouTube, Yelp, and Yammer. Second, people are more likely to start a new organization if their current job is dissatisfying, or if they have little hope of finding satisfying employment. These necessity-drive entrepreneurs often feel pushed into action. For example, both Intel and Hewlett-Packard were founded by engineers who were unhappy with their prior jobs at Fairchild Semiconductor.[75] Likewise, Tom Chappell left his corporate job to "move back to the land" and founded Tom's of Maine (a SET company that sells sustainable personal care products like toothpaste and hand cream). Finally, people may become entrepreneurs to pursue a specific opportunity or their situation otherwise pulls them toward a new venture. Available resources, mentors, or supports can help a person take the leap into entrepreneurship.

FBL, TBL, and SET approaches to taking action

As described throughout this book, an entrepreneur's management approach will have a significant effect on how a new venture is started and managed. Here, we will briefly highlight some differences related to the kind of legal form and financing a start-up pursues. FBL and TBL entrepreneurs, with their focus on high returns for invested capital, are well positioned to appeal to traditional financial institutions and similarly-motivated investors. It often makes sense for such entrepreneurs to start a corporation, with its advantages, because managers of corporations are (in many jurisdictions) legally required to seek to provide profits for shareholder.[76]

In contrast, SET entrepreneurs do not prioritize financial gains, and therefore may encounter poor responses, or even trouble, if they seek financing from FBL-oriented sources. The experience of Ben & Jerry's Ice Cream illustrates issues that SET entrepreneurs may face when founding a traditional corporation. Ben & Jerry's Homemade Holdings Inc. was founded with a SET mission: making the world's best ice cream, running a financially successful company, and making the world a better place. It uses local organic inputs, has developed chemical-free containers, has prioritized fair-trade ingredients, and uses its profits to fund a foundation supporting community-oriented projects. But it is also a public corporation, thus when the European conglomerate Unilever offered to buy the company at a 25% profit, the managers of Ben & Jerry's were legally obliged to accept the offer on behalf of shareholders, even though they feared that their SET mission would be abandoned by Unilever. In other words, as managers of a corporation they had a fiduciary duty to benefit the owners' financial interests and thus accept Unilever's offer.[77]

Recently some lawmakers have made changes that reduce the potential conflict between SET organizations and traditional corporate law. They have created a new kind of corporation, called a **benefit corporation**, *which is a for-profit corporate entity that has legally defined and recognized social or environmental goals*. Whereas shareholders in a traditional corporation may use the law to force managers to pursue profit at the expense of social or ecological outcomes, the shareholders in a benefit corporation may use the law to force managers to pursue social or ecological benefits at the expense of financial profit.[78]

Even with this change, SET entrepreneurs may have trouble financing their organizations, since most debt and equity financing is controlled by FBL-oriented organizations.[79] SET entrepreneurs often do better if they can connect directly with like-minded investors, and so have contributed to the rise of new financing options. The most important of these is **crowdfunding**, *which involves entrepreneurs receiving small amounts of money from a large number of people, often in exchange for a reward (but typically not repayment of the funds or a role in management).*[80] In this model, the entrepreneurs describe their project and goals—often via a short elevator pitch video—and request funds from interested and supportive individuals. The specifics of crowdfunding vary. For example, Kickstarter, the largest and best known organization providing a crowdfunding service, requires the proposed project to have defined start and end dates, to offer rewards to funders, and in the case of physical products, to share information about a prototype. In contrast, Indiegogo has less strict guidelines (e.g., not requiring rewards for funders). Some crowdfunding campaigns set specific goals, and if that goal is not reached, the donors receive their money back and the entrepreneur gets nothing; other campaigns allow the entrepreneur access to whatever funds are offered.

Crowdfunding on a large scale is a relatively new phenomenon and, thanks to communication technology, continues to develop. For example, in 2016, Indiegogo began a trial of a new equity crowdfunding service that allows individuals to receive partial ownership in return for their funds (i.e., they become true investors, rather than just donors). Whatever form it takes in the future, crowdfunding has become an important part of entrepreneurial financing. It has been growing at a remarkable pace, doubling every year, from an $880 million activity in 2010 to more than $34 billion in 2015. At this rate, it will be over $1 trillion by 2020.[81]

Finally, the remainder of the book will provide much more detailed information of this fourth phase, "Take action," regarding the management of entrepreneurial start-up organizations, and consider differences between FBL, TBL and SET entrepreneurs. This will culminate in Chapter 19, which describes the control and information systems called for in managing an organization, and also introduces more discussion of the different business functions (e.g., finance, marketing, operations, and accounting).

Chapter Summary

1. Entrepreneurship creates the vast majority of innovations and new jobs in an economy, and the jobs created by entrepreneurs often have higher levels of social well-being than those created by existing large organizations.

2. Many entrepreneurial ventures are small or family businesses, but not all small or family business are entrepreneurial.

3. The four steps in the entrepreneurial process are:

- identify an opportunity (a promising idea that meets a need)
- test the idea (develop a prototype, use an elevator pitch to gather feedback)
- develop a plan (a business plan or an Entrepreneurial Start-Up Plan)
- take action (mobilize the resources to put your plan into practice).

4. The nine elements of a generic business plan include: Summary, Description of the new venture, Description of products and competitors, Management, Staffing, Marketing, Operations, Finances, and Timeline and contingency plans.

5. Differences in management approach lead entrepreneurs to have different goals, but can also lead to different organizational forms, sources of financing, and relationships with stakeholders.

Questions for Reflection and Discussion

1. What are the benefits of entrepreneurship for society?

2. Identify and describe the four steps of the entrepreneurial process. What are the differences between the FBL, TBL, and SET approaches in each of the four steps?

3. Identify and describe the elements of a business plan for a new venture. How are these elements related to the entrepreneurial process?

4. What are the pros and cons of developing a detailed plan for a new venture prior to start-up?

5. How often do you talk with your friends or family about ideas for starting a new venture? What qualities do you share with successful entrepreneurs who put good ideas into practice? How are you different? What would you need to put your ideas into practice? Explain your answer.

6. If you were to start a new venture, what opportunity would you like to pursue? What trends, surprises, or gaps have you noticed? What possibilities do they suggest?

7. If you became an entrepreneur, would you adopt an FBL, TBL, or SET approach? Why? What implications does that choice have for how you would develop your organization?

8. Use the information in this chapter regarding the parts of an Entrepreneurial Start-Up Plan (ESUP) to create the framework for a new venture you might pursue. Begin to fill in the sections as you are able, especially drawing on your responses to ESUP-related questions that have been presented in previous chapters. Continue to fill in your ESUP as you work your way through the rest of this book.

PREVIEW AND SUMMARY OF CHAPTER 9

	FBL	TBL	SET
Step 1: Establish mission and vision **emphasis on:** **establish via:**	Competitive strategy Top-down process	Mostly competitive Mostly top-down	Collaborative strategy Participative process
Step 2: Analyze internal & external factors (SWOT) **a) Internal Strengths and Weaknesses**			
- *valuable* resources can help to …	Improve financial well-being	Improve financial & other well-being	Improve socio-ecological well-being
- *rare* resources can help to …	Achieve financial competitive advantage	Achieve TBL competitive advantage	Help others improve socio-ecological well-being
- *inimitable* resources enhance …	Exclusivity/competitive advantage	TBL competitive advantage	Responsibility to teach others
- *non-substitutable* resources help to enhance …	Shareholders' financial security	Shareholders' financial security	Stakeholders' net well-being
b) External Opportunities & Threats			
- supplier power	Seek to have low dependence on suppliers	TBL approach is similar to FBL approach, unless there are opportunities to establish relationships with other organizations that enhance profits while reducing negative socio-ecological externalities	Seek to optimize interdependent relationships with other organizations that enhance positive socio-ecological externalities
- buyer power	Seek to have low dependence on buyers		
- substitutes	Prefer to have few substitutes		Welcome socio-ecological well-being enhancing substitutes
- new entrants	Seek to create entry barrier		Reduce barriers that impede socio-ecological well-being
- rivalry	Seek to reduce competition		Optimize collaboration that aids socio-ecological well-being
Entrepreneurship implications	Learn to develop a stakeholder map for entrepreneurs		

CHAPTER 9: STRATEGIC MANAGEMENT A: THE FOUNDATION

Learning goals

After reading this chapter, you should be able to:

1. Identify the first two steps of the strategic management process.

2. Describe the differences between the FBL, TBL, and SET approaches with regard to the establishment of organizational mission and vision statements.

3. Describe the differences between the FBL, TBL, and SET approaches to analyzing an organization's internal strengths and weaknesses and its external opportunities and threats.

4. Apply the first two steps of the strategic management process when developing a stakeholder map for entrepreneurs.

HOW VISION CAN TRANSFORM PROBLEMS INTO OPPORTUNITIES[1]

Shaun Loney is a serial entrepreneur with a Social and Ecological Thought (SET) approach. Where others see problems, he sees opportunities. Loney played an important role starting-up several new ventures, including BUILD and Aki Energy. BUILD (Building Urban Industries for Local Development) is a social enterprise that reduces homeowners' energy consumption by improving the insulation in their homes and installing low-flush toilets. BUILD hires people like ex-convicts or gang members who have a tough time getting a job. Aki Energy uses a similar labor pool, and has become the largest company in the region installing geothermal heating. Loney was thinking of starting a similar venture when he flew into the Garden Hill First Nation, a community of 4,000 people about an hour north of Winnipeg, Manitoba.

If you were to fly to Garden Hill, you would notice that the plane lands on an island apart from the community on the mainland. You'd also notice that the

Northern Store (which has outlets in many northern communities) is the only grocery store serving Garden Hill, and that it is located on the island. If you were to visit the store, you'd be struck by the high prices, especially for the small selection of fresh vegetables and fruits.[2] And you'd discover that to take the water taxi that connects the island to the community costs $5 per person for a one-way trip.

After arriving in the community on the mainland, you soon learn that the unemployment rate is about 75%. You'd also hear that, like other communities that lack access to affordable healthy food, about 500 of the 4,000 citizens of Garden Hill have diabetes, 50 of whom are children. The government recently built a small $5 million six-bed hospital in the community so that patients could receive dialysis treatment there, which is less expensive than flying them to Winnipeg. In remote communities, dialysis costs about $100,000 per year per patient. A generation ago diabetes rates were so low in communities like Garden Hill that medical researchers travelled there in order to study why.

These observations are available to any visitor to Garden Hill, and they would be seen as difficult problems to solve. But Loney is not just any visitor, and he saw these problems as opportunities for Garden Hill to start new food-related businesses. The opportunities included a high-priced competitor in a poor location ($10 round trip), an ample labor force keen to work, a huge need, and a motivated customer base wanting healthy food.

So Loney rolled up his sleeves, shared his vision with leaders and others in the Garden Hill community, and helped to start up a variety of new enterprises under the name of Meechim Inc. (Meechim means "food" in Oji-Cree, the language of the community). Within two years, Meechim had generated annual revenues of $500,000 and had 18 employees. It started with a bi-monthly healthy pop-up food market, which sells fruit, vegetables, meat, locally caught fish, and healthy cooked meals. The market is located at the local TV station, which offers a live broadcast of what is available in the Oji-Cree language. Loney jokes: "It may be the world's only healthy food shopping channel." Meechim also sells healthy food alternatives in the canteen at the local arena, offering fruits and vegetables and featuring local Garden Hill chicken soup.

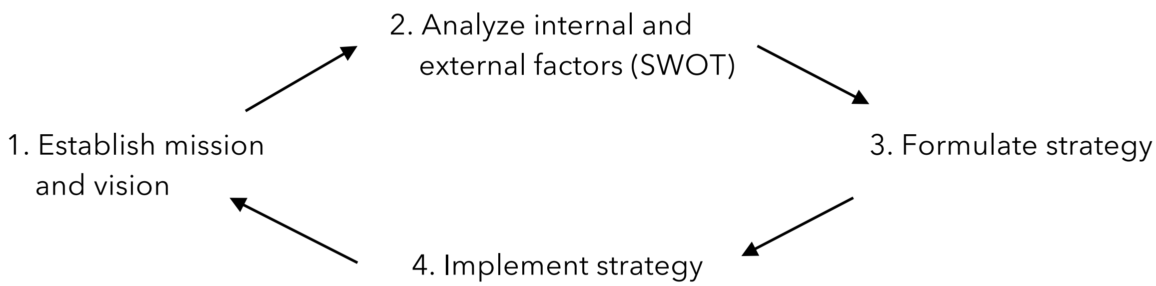
Perhaps the most impressive Meechim initiative has been the one that was both the most obvious and yet overlooked. Five hectares (13 acres) of land have been cleared to establish a community garden to grow local produce in Garden Hill, thus putting the "garden" back in Garden Hill. They have also started to raise chickens to provide eggs and ingredients for chicken noodle soup. Loney notes that, assuming that a household eats one chicken per week, and a community has 500 households, and that a chicken costs $10, that's a potential annual gross revenue of $250,000. Add to that locally available berries, maple syrup, potatoes, wild rice, carrots, beets, and lettuce.[3] Soon you have $1 million local food economy, where much of the money and profits stay in the local community and is enhanced by the local multiplier effect. Previous research shows that even one such enterprise can make a world of difference to an isolated economy.[4]

The world would be a better place with more entrepreneurs who have the vision and mission of people like Shaun Loney. What "problems" are you aware of that actually represent opportunities for new start-ups?

Strategic management *refers to the analysis and decisions that are necessary to formulate and implement strategy.* **Strategy** *refers to the combination of goals, plans, and actions that are designed to accomplish an organization's mission.* An organization's **mission statement** *identifies the fundamental purpose of an organization, and often describes what an organization does, whom it serves, and how it differs from similar organizations*. The importance of strategic management is illustrated by the difference between Walmart and Kmart. Both companies were founded in 1962. The two chains have other striking similarities: names, store atmosphere, markets served, and organizational purpose. Yet, Walmart's financial performance has far surpassed that of Kmart. Why? Because managers vary in how well they formulate and implement strategies, and this affects their organization's performance. Walmart has been very good at Financial Bottom Line (FBL) strategic management, and at managing the transition to Triple Bottom Line (TBL) strategic management, whereas Kmart has long struggled to find the right combination of strategic direction and appropriate implementation.[5] In this chapter, we describe the first two steps of the strategic management process, and highlight the implications for doing entrepreneurial stakeholder analyses.

Strategic management involves a four-step process: (1) establish the mission and vision of the organization; (2) analyze its external environments and internal resources; (3) formulate the strategy to be followed; and (4) implement the chosen strategy. Successful implementation then feeds back to the beginning of the process as managers ensure that the strategy remains relevant. Although the process depicted in Figure 9.1 is a useful way to think about strategic management, the four steps are not as neatly laid out in real life, and in fact each step in the model can be seen as related to the others.

Figure 9.1: Overview of the four-step strategic management process



STEP 1: ESTABLISH ORGANIZATION'S MISSION & VISION

The first step in the strategic management process is to establish an organization's mission and vision. Recall that the mission statement identifies the fundamental purpose of an organization, and often describes what an organization does, the stakeholders it serves, and how it differs from similar organizations. A mission statement can provide social legitimacy and a sense of identity for the members of an organization. The mission of *31 bits* (see the opening case in Chapter 1) is very short: "Using fashion and design to empower people to rise above poverty."[6] As many as 90% of companies have a mission statement,[7] which may contribute to their financial performance.[8] Most mission statements mention some, but not all, of the following nine elements, including the organization's:[9]

1. Products/services (e.g., banking services, game apps, fresh vegetables)

2. Customers (e.g., university students, seniors, Millennials, basketball fans)

3. Self-concept (e.g., identify distinctive competency or competitive edge: safest, fastest, environmentally-friendliest)

4. Survival/growth/profitability targets (e.g., stable, rapid, cautious)

5. Employees (e.g., go-getters, diverse, engineers, long-term, treated with dignity)

6. Markets and regions of operation (e.g., local community, city, region, national)

7. Philosophy and values (e.g., customer is always right, shareholder is #1, triple-bottom-line, social justice, ecological well-being)

8. Technology used (e.g., high-tech, low-tech, hands-on, affordable)

9. Public image (e.g., socially and/or environmentally friendly, local, international leader in marketplace).

The organization's ongoing mission statement is often accompanied by a future-oriented **vision statement**, *which describes what an organization is striving to become, and thereby provides guidance to organizational members*. A vision statement typically describes goals that an organization aspires to achieve five or more years into the future. For example, the *mission* of a university is to teach students, engage in research, and provide service to the community. The *vision* of a university may be to maximize diversity in the classroom, to be a world leader in medical research, or to foster a sense of global citizenship. A tourist destination may have the *mission* to provide local employment and to be friendly to visitors, and the *vision* of becoming the honeymoon capital of the world.

Research suggests that managers should develop vision statements that are:[10]

1. Visionary/Future-oriented (e.g., by 2030 we will be …)

2. Inspiring (e.g., we will be the world leader, most-admired …)

3. Challenging (e.g., grow tenfold, reduce GHG emissions by 90% from 2017 levels)

4. Brief (preferably no more than 30 words) emphasis

5. Clear (can be understood without re-reading)

6. Stable (does not need to be changed or being updated annually).

The content and effect of both mission and vision statements may be related to the organization's context. For example, the performance of government service agencies may be related to vision statements that recognize the need for strong interpersonal relationships among their members (e.g., "we will provide best-in-field working conditions and service"), whereas the growth of entrepreneurial businesses may be associated with vision statements that express a need for power (e.g., "we will be #1 in our industry").[11]

Although we have described the conceptual difference between a mission statement and a vision statement, these differences are often not so clear in actual mission and vision statements that companies publish. For example, an organization's vision statement sometimes includes elements of its mission, such as its guiding philosophy, purpose and core beliefs.[12] *The important thing is that managers clearly understand their own organization's fundamental purpose* and *its long-term aspirations*. Some organizations do not have a formal mission or vision statement, but they do have certain statements that function in the same way. For example, a fitting mission statement associated with Apple Computer comes from its co-founder, Steven Jobs: "To make a contribution to the world by making tools for the mind that advance humankind."[13] And Jobs' early vision statement for the firm was: "An Apple on every desk."[14]

FBL, TBL, AND SET APPROACHES TO MISSION AND VISION

When it comes to establishing mission and vision statements, there will be differences in the three approaches to management regarding: 1) the content of the statements, 2) the strategic orientation underpinning the statements, and 3) the process used and people participating in developing the statements. These are summarized in Table 9.1.

Table 9.1: Differences in three management approaches to mission/vision statements

	FBL	TBL	SET
Emphasis in the content of statements	Financial bottom line; acquisitive economics	Triple bottom line; mostly acquisitive economics	Socio-ecological well-being; sustenance economics
Strategic orientation	Competitive strategy	Mostly competitive strategy	Collaborative strategy
Emphasis in process; key participants	Top-down; Top management team	Mostly top-down: Key stakeholders	Participation; All stakeholders

Content

In the FBL approach, mission and vision statements focus on acquisitive economics and the things that contribute to an organization's financial bottom line. The TBL approach adds a focus on social and ecological well-being initiatives that enhance the organization's financial well-being; acquisitive economics is also emphasized, but with some sustenance economics if it serves the organization's financial interests. The SET approach focuses on ecological and/or social aspects based on sustenance economic assumptions.

Strategic orientation

There is a difference in the emphasis on competitiveness across the three approaches of management. An FBL approach can generally be characterized by its emphasis on maximizing competitive advantage. A **competitive strategy** *is designed to create value for customers by providing lower prices and/or unique features not offered by other organizations.* From an FBL perspective, competitiveness is good for society because it motivates people and organizations to do their best. It encourages organizations to continuously improve, promotes efficiency, and reduces opportunities to "gouge" the consumer. Besides, it seems natural for people to compete against others and themselves.

TBL management also emphasizes a competitive strategy, but at the same time recognizes that in some instances a collaborative strategy may better serve an organization's financial interests. A **collaborative strategy** *is designed to create value for customers by cooperating with stakeholders to provide goods and services that enhance overall positive externalities.* In addition to sharing FBL management's concern for shareholder well-being, the TBL approach includes concern for mutually beneficial cooperation and the well-being of multiple stakeholders. For example, McDonald's works with the Noble Foundation, an agricultural non-profit organization, to see if they can find a mutually beneficial way to raise sustainable beef.[15]

SET management recognizes that a singular emphasis on competitiveness may be dysfunctional, as is evident when people cheat in order to win (e.g., think of GE's legal record under Jack Welch, the exemplar of FBL management described in the opening case of chapter 1).[16] A "win at any cost" mentality can bring out the worst in people, such as when athletes take illegal performance-enhancing drugs that offer a short-term performance boost at the expense of long-term health, or when politicians resort to "mud-slinging" during election campaigns, or when managers engage in illegal or unethical behavior in order to maximize profits. Competitiveness can bring out the worst in humankind when we seek to suppress our competitors in order to improve our own chances of winning. A generic SET mission statement might say: "Working together with stakeholders, we will create socio-ecological and financial well-being." For example, when then-CEO Dennis Bakke set up the mission statement

Competitiveness can bring out the worst in humankind when we seek to suppress our competitors in order to improve our own chances of winning.

for AES, one of the largest energy providers in the world, he included the phrases "creating the world's most fun place to work" and "serving society in an economically sustainable manner with *safe*, clean, reliable electricity."[17]

SET management suggests that, even at its best, competitiveness simply is not good enough to warrant its central role in management theory, and the SET approach challenges the assumption that the desire to compete will bring out the best in humankind. Rather, the SET approach assumes that the desire to share, or to eradicate poverty, or to live sustainably on the planet, or to ensure that everyone is treated with dignity, is much more likely to truly bring out the best in us. It asks "What if our organizational mission and vision statements, and our structures and systems, were designed towards these ends, instead of designed simply to out-compete the so-called enemy?"[18]

The process of setting the vision and mission statements

When it comes to setting the mission and vision statements, FBL management emphasizes the input of the organization's top management team, while TBL management includes other stakeholders inside and outside the organization who can affect the triple bottom line. The SET approach may add even more stakeholders, including those who are more distant from the financial success of the organization. For example, in some countries the ecological environment is seen as a stakeholder with legal rights. Ecuador in 2008 included the Rights of Nature (RoN) in its constitution, becoming the first country in the world to do so. The RoN is presented as a tool for enhancing sustainability that promotes living in harmony with nature (based on an Indigenous Andean concept of *sumak kawsay*).[19]

In 2008 Ecuador became the first country in the world to include the Rights of Nature in its constitution.

The FBL approach takes the least amount of time and is completed by the people who are likely to have the best overall understanding of an organization's internal and external factors. TBL management involves more people and takes more time, but the understanding and ownership of key stakeholders from this process facilitates broader support and commitment, and thus a greater likelihood of achieving success. The SET approach invites even more people to participate in the process of setting mission and vision statements, which takes even more time. However, when an organization's mission and vision take into account the needs of the socio-economic and ecological environments, organizational members may find their work is more meaningful and motivating.[20]

STEP 2: ANALYZE EXTERNAL & INTERNAL FACTORS (SWOT)

The second step in the strategic management process is to perform a SWOT analysis, which is an acronym for **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats. A **SWOT analysis** *examines an organization's internal strengths and weaknesses in light of external* *opportunities and threats.* **Strengths** *refer to valuable or unique resources that an organization has or any activities that it does particularly well.* A strength is a positive internal characteristic of the organization that can help managers achieve their strategic objectives. **Weaknesses** *refer to a lack of specific resources or abilities that an organization needs in order for it to do well.* A weakness is a negative internal characteristic of the organization that hinders the achievement of the strategic objectives of an organization. When Garden Hill First Nation first talked about starting Meechim Food, a strength was the community's access to land for gardening, and a weakness was that its members had little recent experience with gardening.

Opportunities *are conditions in the external environments that have the potential to help managers meet or exceed organizational goals.* Sometimes recognition of opportunities will prompt managers to revise goals. Meechim Foods identified a variety of opportunities, including access to a motivated labor force, a single competitor with high prices in an inconvenient location, and many customers with a strong desire for healthier food options. **Threats** *are conditions in the external environments that have the potential to prevent managers from meeting organizational goals.* For example, at present the Northern Store qualifies for government subsidies to fly in fresh tomatoes, but there are no subsidies for Meechim to grow tomatoes in the community. An analysis of the external environment is key to uncovering what current and future opportunities and threats might exist.

The following paragraphs provide an in-depth discussion of SWOT analyses, and introduce the best-known analytical tools and techniques to help managers. We start with identifying an organization's internal factors (strengths and weaknesses), and then examine its external factors (opportunities and threats).

INTERNAL FACTORS (STRENGTHS AND WEAKNESSES)

Managers must be aware of the available resources in their organization in order to understand its strengths and weaknesses. The best-known theory in strategy that looks at an organization's resources is called the Resource-Based View (RBV). Three different variations of RBV have been developed in the literature, each of which generally corresponds to one of the three management approaches. Conventional RBV aligns with FBL management, Natural RBV aligns with TBL management, and Radical RBV aligns with SET management.[21]

According to the RBV, **resources** *are organizational assets, capabilities, processes, attributes and information that are controlled by an organization and that enable the firm to formulate and implement a strategy that improves its efficiency and effectiveness.*[22] It is helpful for managers to look at three different types of internal resources: physical, human, and infrastructural.[23] *Physical resources* refer to material assets an organization owns or has access to, including its factories and equipment, its financial assets (e.g., cash), its real estate, its inventory, and so on. Some physical resources represent tremendous strengths that other organizations may not have, such as deep financial resources. Other assets are strategically less important, including assets that are necessary simply to participate in an industry, such as buildings, office furniture, organizational web-sites, or vehicles. A key physical resource for Meechim Inc. is its access to a 5 hectare parcel of land for gardening.

Human resources refer to specific competencies held by an organization's members. This includes things like formal training (e.g., some members have valuable education or highly-valued professional designations) and informal experience (e.g., tacit knowledge, networks, and "street smarts" that come from many years of experience). Organizations have strengths if they have particularly gifted or experienced members, and weaknesses if their members lack the required experience or training. Examples of strengths include a sports team that has an outstanding athlete, a law firm with a retired judge, and a university that has a Nobel Prize winner. Weaknesses include a sports team that lacks adequately-skilled players in some positions, a law firm whose members lack expertise in important legal areas, and a university with poor teachers. Meechim Inc has a motivated labor force.

A SWOT analysis *examines an organization's internal Strengths & Weaknesses in light of external Opportunities & Threats*.

Infrastructural resources refer to an organization's structures and systems. Included in this category are things like the organization's formal and informal planning processes and control systems, the nature of informal relationships among group members, the level of trust and teamwork, and other aspects of the organizational culture. A key infrastructural resource that has helped Walmart is its logistics system that allows it to distribute goods to its stores much more efficiently than its rivals.

Managers assess physical, human, and infrastructural resources to identify the organization's strengths and weaknesses. They then use this information to develop strategies to take advantage of strengths and minimize the impact of weaknesses as they seize opportunities and neutralize threats in the external environment. Sometimes managers will identify key weaknesses that must be addressed, and even unnecessary strengths that can be sold-off. A common example of this occurs when sports teams trade players with one another.

Not all strengths and weaknesses are equally important. For example, a flower shop may own a powerful computer, but this is of little importance if managers do not take advantage of its power to, say, develop an information system about its customer base. **Core competency** *refers to a strength that is central for the achievement of organizational goals,* such as when the flower shop has human resources that are knowledgeable about floral arranging. *A* **distinctive competency** *is a core competency that an organization has that is superior compared to its competitors.* **Competitors** *are other organizations that offer similar products or services, or offer products or services that meet the same customer need.* For example, a flower shop may have a prize-winning member who arranges flowers, or perhaps the flower shop's location is close to a hospital, wedding chapel, or funeral home. These represent distinct advantages compared to other flower shops that have less accomplished staff or less favorable locations.

RBV helps managers to achieve effective, sustainable strategies. As summarized in the Chapter's preview table, the meaning of this differs across the three management approaches. From an FBL perspective, it means developing financially successful competitive strategies that other organizations are unable duplicate. From a TBL perspective, it means developing triple bottom-line strategies other organizations are unable duplicate. From a SET perspective, it means developing overall well-being-enhancing collaborative strategies that improve the net overall positive externalities for all stakeholders. The key to developing such effective and sustainable strategies is to identify resources that, on their own or bundled together in a group, have four characteristics: they must be valuable, relatively rare, inimitable, and non-substitutable (VRIN).[24]

Characteristics of resources (VRIN)

Valuable resources *are those that managers can use to neutralize threats or to exploit opportunities to meet their organization's mission in light of conditions in the external environment*. Whereas FBL and TBL approaches generally equate the value of a resource to its eventual contribution to the financial bottom-line of the organization, SET is more likely to find resources valuable if they satisfy genuine human needs beyond finances. For example, McDonald's alliance with the Noble Foundation is valuable from a TBL approach if it enhances McDonald's profitability, but it would also be valuable from a SET approach if it enhanced ecological well-being (even if it did not enhance profits).

Rare resources *are those that no (or few) other organizations have.* Common examples of rare and valuable human resources might include highly-skilled sports stars and CEOs with an excellent track record. Another example of rare resources is valuable patents, as illustrated by Mylan (EpiPen) and Turing Pharmaceuticals (Daraprim) as described in Chapter 3. Whereas rare resources are valuable to FBL and TBL managers because they can generate higher revenues, SET managers see rarity as increasing the need to act responsibly. For example, the Earth may be the rarest thing in the universe.[25] We know of only one planet that can sustain human life, therefore we must manage this rare resource responsibly. Similarly, SET principles are evident when pharmaceutical companies permit generic versions of their patented antiretroviral drugs to be made available in Africa for a fraction of the cost that they are sold for in higher-income countries.[26] SET managers recognize that rare resources that are valuable to humankind should not be seen merely as an opportunity to maximize financial gain.

Whereas rare resources are valuable to FBL and TBL managers because they can generate higher revenues, SET managers see rarity as increasing the need to act responsibly.

Inimitable resources *cannot be copied or developed by other organizations, or it is costly or difficult to do so.* FBL managers value resources that are inimitable because this enhances their opportunity to enjoy a kind of monopoly in the marketplace. This includes patented assets, which are literally illegal to copy, but it can also include things like an organization's unique customer-friendly culture, or its ability to learn and adapt.[27] Not all inimitable resources are rare or valuable; for example, there are patented products for which there is no market. TBL management welcomes inimitable resources that enhance socio-ecological well-being while simultaneously optimizing financial well-being. For example, the Lincoln Electric Company has a difficult-to-copy culture and gainsharing program that enables both employees and owners to achieve higher-than-average financial outcomes.[28] Finally, unlike FBL and TBL managers who guard their inimitable resources, SET managers will often volunteer the "secrets" of their resources. For example, managers of organizations that were pioneers in the microfinancing movement, like Mohammed Yunus and the Grameen Bank (see Chapter 6), are eager to share best practices with other banks and non-profit organizations who wish to provide credit to micropreneurs.[29]

Non-substitutable resources *cannot be easily substituted by other resources.* Substitutes are different resources (or bundles of resources) that can be used to achieve an equivalent strategic outcome, even though the substitutes may not be rare or inimitable. This can include a firm's organizational policies and procedures that enable it to exploit its valuable, rare, and inimitable resources.[30] For example, both Meechim and the Northern Store sell chickens to the residents of Garden Hill, but Meechim uses a very different bundle of resource to bring its (substituting) chickens to the market. Northern Stores cannot match Meechim's bundle of resources to raise chickens locally, so it has to bring chickens in by airplane. If they have non-substitutable resources, then FBL managers can safeguard their firm's financial interests from threats by other organizations with different resources.

Sometimes managers will engage in "espionage" to acquire or copy the valuable, rare, inimitable, and non-substitutable resources of their competitors. For example, prior to the success of mass production techniques used in Mars candy bars, the lion's share of the chocolate confection industry was held by Cadbury's, which used a labor-intensive process to produce many of their chocolates. Eager to find out how the Mars bar technology worked, Cadbury's approached companies who supplied machinery to Mars, and also hired managers who had worked inside the Mars factory (they were dubbed "the men from Mars").[31]

Daraprim's attributes of being valuable, rare, inimitable and non-substitutable enabled Turing Pharmaceuticals to increase its price by 5,000%.

For FBL and TBL managers, the fact that no other organization can offer substitutes for their valuable, rare, and inimitable resources gives managers a greater opportunity to maximize their firm's financial interests. This is similar to a monopoly, because customers cannot find equivalent resources elsewhere. For example, as Martin Shkreli had known, Daraprim's attributes of being valuable, rare, inimitable and non-substitutable (at least in the short term) is what gave Turing Pharmaceuticals the opportunity to increase its price by 5,000%.

SET managers also want to ensure that their organizations remain financially viable, but they are also likely to encourage substitutes that value overall community well-being. For example, Dan and Wilma Wiens (Chapter 4) welcome and provide valuable information to help sharers to start their own backyard gardens (and thus lose them as paying customers). The Wiens's also help others to set up new, possibly competing, CSAs. The Wiens's goal is to improve socio-ecological well-being, not to maximize their own financial self-interests.

EXTERNAL FACTORS (OPPORTUNITIES AND THREATS)

As is evident in a number of chapters in this book, an important part of a manager's job is to monitor and to respond to the organization's technological, political, social, and ecological environments. Managers must pay particular attention to the environment and stakeholders in their organization's industry. The term industry often refers to the subset of business organizations that are active in the same branch of the economy (e.g., the automobile industry, the fast-food industry). Since strategic management is also important for managers in non-business organizations, we will use the term more generally so that **industry** *refers to all organizations that are active in the same sector of social, political, and/or economic activity.* Examples of non-business industries include much of the education sector and the social services sector.

Helpful tools and resources have been developed to assist managers in the complex process of analyzing an industry. We focus on the "Five Forces Model" which is the best-known tool to help managers think about key external opportunities and threats.[32] This model was initially developed by Michael Porter—perhaps the most-cited strategy scholar on the planet—at a time when FBL management was the dominant approach, but the model is robust enough to also be useful for TBL and SET management approaches. Although the five forces model was developed to compare the relative attractiveness of different industries, it has also been used to help managers make strategic decisions within the industry where their organization operates.

The "Five Forces Model" is the best-known tool to help managers think about external opportunities and threats.

Supplier power

Supplier power *describes how much influence suppliers have over an organization.* FBL managers prefer industries where an organization's suppliers lack power over it. Supplier power generally decreases as the number of suppliers increases. Because there are many different suppliers of commodities like paper and pens, managers are more likely to be able to negotiate low prices for basic office supplies. In contrast, the Northern Store has a lot of power in communities where there are no other grocery stores. The oil industry is an interesting example of how supplier power may decline over time. Cartels such as OPEC traditionally had a lot of power because there were relatively few places where companies like Exxon and Mobil could purchase oil. But with the dramatic increase in the supply of oil in recent years due to new technological developments like fracking, oil companies now have more alternatives suppliers to choose from.

FBL management focuses on optimizing competitive position and relative power, so it prefers situations where there are many suppliers, thereby minimizing the need to become dependent upon one (or a few) suppliers. This enables managers to choose from many potential competing suppliers based on which one offers the lowest bid, and makes it easier to switch from one supplier to another. This is consistent with the contractual basis of acquisitive economics.

TBL management is similar to the FBL approach, except that TBL management is less interested in maintaining power over suppliers for its own sake, and is more willing to enter into long-term financial well-being-enhancing win-win relationships with suppliers, especially for reducing negative externalities. For example, Costco is actively working at increasing the number of suppliers of organically-grown produce, and is happy to enter into mutually beneficial long-term relationships with specific suppliers.[33]

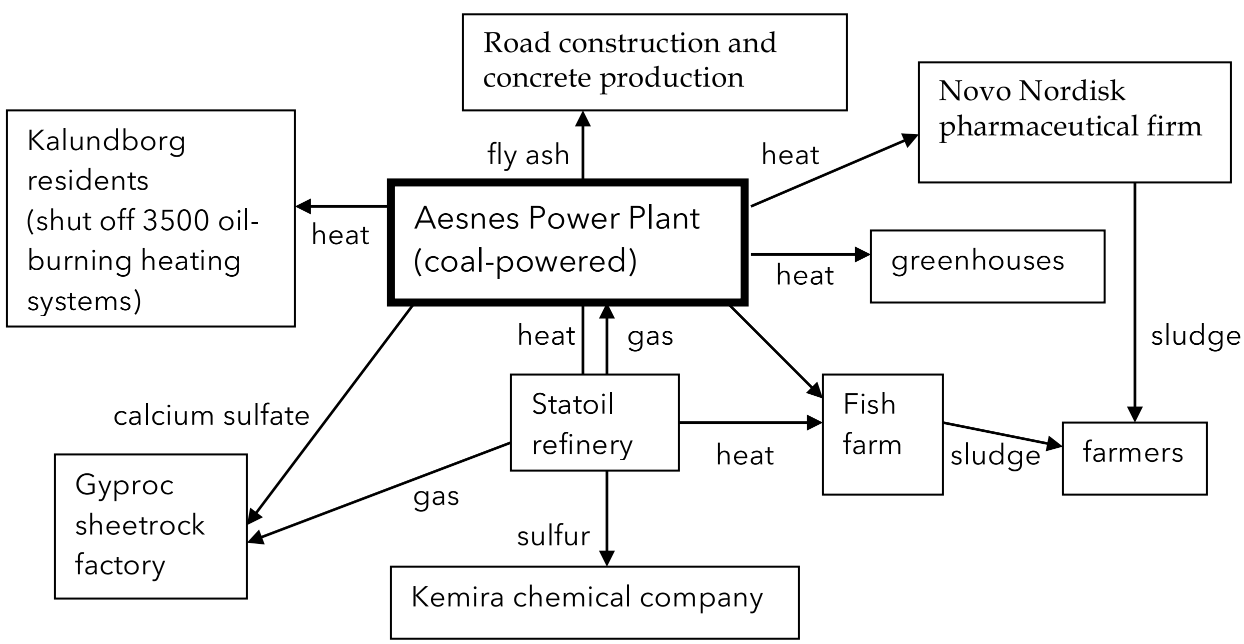
The SET approach is even more committed to collaborative relationships with suppliers in order to develop mutually beneficial opportunities, especially to enhance positive externalities. The canteen in Garden Hill is happy to become dependent on a local supplier of chicken noodle soup, rather than to fly soup in from other remote suppliers. From a SET perspective, suppliers are seen as partners, and empowering and strengthening partners is considered to be a good thing.

A community of TBL and SET organizations in Kalundborg, Denmark, provides a helpful example of Porter's five forces model in practice, where firms work collaboratively to reduce negative ecological externalities. Although these firms operate in a variety of industries, they belong to a place-based ecological community. Managers in this community take the so-called "waste" that is produced by one organization and change it into inputs that are valued by a different organization (see Figure 9.2). It began when the coal-fired Aesnes Power Plant stopped pouring its "waste" steam heat as condensed water into a nearby fjord. Instead, managers at Aesnes began to sell that heat directly to two other organizations in the community, the Statoil refinery and the Novo Nordisk pharmaceutical firm. Not long after this, the Statoil refinery installed a process that removed sulfur from its "wasted" gas. Statoil then sold the extracted sulfur to the

Businesses in Denmark have formed a place-based ecological community where they take what had been "waste" in one organization and use it as valued inputs in another.

Kemira chemical company, and it sold the cleaner-burning gas to the Gyproc sheetrock factory and to Aesnes (thereby saving 30,000 tons of coal). When Aesnes began to remove the sulfur from its smokestacks it produced calcium sulfate, which it sold to Gyproc, which used it in place of mined gypsum. "Waste" fly ash from Aesnes coal generation is used for road construction and concrete production. In time, Aesnes began to provide surplus heat to residents of the town (who were then able to shut off 3,500 oil-burning heating systems), to greenhouses, and to a fish farm. Soon "waste" heat from Statoil also went to the fish farm, helping it to produce about 200 tons of turbot and trout sold in the French market. Sludge from the fish farm is used as fertilizer by farmers, who also receive sludge from the Kemira chemical company. All these relationships happened spontaneously without direct government regulation. Initially relationships were often motivated primarily by acquisitive economics (FBL and TBL approaches), but over time many initiatives have been motivated largely by ecological reasons (SET management). Many of these relationships have also yielded financial benefits.[34]

Figure 9.2: Transfer of previous "waste" within a community of organizations



Whereas FBL management is concerned with minimizing dependence on suppliers, the example above shows that TBL and SET firms welcome dependence on new (trustworthy) suppliers who reduce negative externalities by transforming their under-utilized resource outputs ("waste") into materials for inputs. For example, nearby greenhouses were happy to depend on "waste" heat supplied by the Aesnes Power Plant.

Customer power

Customer power *describes how much influence customers have on an organization*, and in this way it can be seen as mirror image of supplier power. From an FBL perspective, firms prefer industries where customers have little power to negotiate for lower prices, where customer demand exceeds the amount of product they can supply, and where sales are not dependent on a handful of large customers.

TBL managers also do not to want to become dependent on customers, but are more willing to do so than FBL managers if it reduces overall negative externalities while enhancing their organization's financial interests. For example, Statoil is happy to depend on Kemira to purchase its excess sulfur, especially if that increases Statoil's profits.

SET managers are even more willing than TBL managers to become dependent on specific customers in order to nurture collaboration and to transform waste. For example, Novo Nordisk's primary motive to transform its "waste" sludge was not to increase its power over the customers (farmers) who purchased the sludge, but rather to help farmers meet their needs for fertilizer and simultaneously enhance positive ecological externalities. That is, instead of the sludge being wasted, it is transformed into nutrients to grow food. Whereas SET firms would be willing to provide this previous waste for free, TBL would seek to earn some profit from its sale. And whereas SET would tend to emphasize how the sludge enhances the quality of the soil, TBL would tend to emphasize how the sludge reduces waste.

Substitutes

Substitutes *refer to products or services that are similar or that meet the same needs of a customer, but come from a different industry.* When managers in the airline industry try to attract customers who are traveling from one city to another, those customers can also find substitute travel opportunities on trains or buses, or services like Skype that reduce their travel needs altogether.

An FBL approach seeks to suppress or minimize possible substitutes. These suppression attempts may or may not be successful. For example, the automobile industry originally tried to suppress (or ignore) the advent of electric cars, but they are now in danger of losing customers to companies like Tesla. Fossil fuel giants have in the past argued against the role of humankind in contributing to climate change, but today alternative energy companies are providing wind and solar power in ever-increasing amounts.

TBL management is also likely to restrict substitutes, except when substitutes offer an opportunity to optimize financial performance via socio-ecological means. Thus, TBL-oriented fossil fuel corporations and conventional automobile manufacturers have benefited from responding to consumer demand by developing their own environmentally-friendlier substitutes for their traditional GHG-emitting products (e.g., Toyota's Prius, Chevrolet's Volt).

SET management is the most likely to embrace substitutes that enhance overall community well-being and create net positive externalities. For example, even though it may have lost revenues, Statoil welcomed the substitute heat that Aesnes provided for what had been 3,500 oil-burning customers in Kalundborg. Again, unlike TBL management, SET management is happy for such substitutes even if when they do not increase profits. Similarly, SET managers at Meechim Inc. would be pleased to share tips with households in their community who want to start a home garden.

Threat of new entrants

Threat of new entrants *refers to conditions that make it easy for other organizations to enter or compete in a particular industry.* The higher the barriers to entry—that is, factors that make it difficult for an organization to enter an industry—the lower the threat of new entrants. Government regulations can serve as barriers to entry. For example, licenses are required to start a new television station. Another barrier to entry is the start-up costs to enter a new industry. For example, because the cost to open an income tax service is much lower than the cost to build an oil refinery, we would expect more new competitors in the income tax service industry than in oil refining. Economies of scale are a barrier that can prevent small firms from entering an industry with established large firms, such as the automobile industry.

FBL management prefers industries with high barriers to entry, which makes it difficult for others to compete, and which bolsters opportunities to maximize financial value capture. The FBL approach encourages firms to gain economies of scale, differentiate their products, and lobby the government to regulate entry. For example, because e-cigarettes may help people quit smoking, their introduction to the marketplace threatens the sales of existing smoking cessation products offered by drug companies, so these drug companies have lobbied the U.S. government to introduce regulations that make it difficult to sell e-cigarettes.[35]

FBL management prefers industries with high barriers to entry.

Like the FBL approach, TBL management is also interested in reducing the threat of entry, unless the new entrants enable a firm to increase its profits while addressing socio-ecological issues. For example, firms in the Alberta oil sands might welcome new entrants that would help them reduce the negative ecological externalities that exist in the process of turning bitumen into oil.

The SET approach is the most likely to welcome new entrants that can improve overall socio-ecological well-being. For example, Meechim would welcome changes in government legislation that permits a competing community-based organization to raise chickens without the restrictions limiting the number of chickens it can raise. Similarly, Dan and Wilma Wiens welcomed and facilitated the entry of new CSAs in their community (opening case in Chapter 4).

Intensity of rivalry

Intensity of rivalry *refers to the intensity of competition among the organizations in an industry*. Intensity increases when:

1) an organization has many competitors seeking similar customers

2) the industry growth rate slows down or declines (which means that there are more competitors for every remaining customer)[36]

3) the industry has intermittent overcapacity (such as post-Christmas sales of wrapping paper, or sale of farm produce during bumper harvests)

4) brand identity and switching costs are low (customers can shop based only on price because a long-term relationship with a buyer is not an issue)

5) an organization's fixed costs are high and cannot be easily converted to a new industry or product; (e.g., rivalry in the airline industry is intense because it is difficult to convert airplanes and workers to purposes other than flying passengers)

6) there is little ability to differentiate the product or service being offered (e.g., rivalry in the airline industry is intense because the service is almost identical across competing airlines).

FBL management prefers low levels of rivalry intensity, which occur when there are fewer competitors, when industries are growing, when there is demand for an organization's goods and services that exceeds the supply, when a firm enjoys a strong positive brand identity, and when firms have the opportunities to differentiate their products and services from others (i.e., firms are not offering generic commodities). These observations point to an underlying irony within the FBL perspective, because its emphasis on competitive strategy actually decreases competition and seeks to create competitive advantages akin to a monopoly, such as fewer competitors and fewer substitutes.[37] Thus, on the one hand FBL is all about competition, but on the other hand FBL ideas about competitive advantage can create monopolies.

FBL's emphasis on competitive strategy actually decreases competition and seeks to create competitive advantages akin to a monopoly, such as fewer competitors and fewer substitutes.

TBL management is like FBL management, except that rivals might cooperate to enhance profits and reduce negative socio-ecological externalities. This has happened in the oil industry as companies collaborate to decrease the negative ecological externalities and financial costs associated with extracting oil from the Alberta oil sands.

Rather than seek to limit rivalry intensity per se, SET management is concerned with increasing mutually beneficial collaboration across organizations, which involves reconsidering the six factors that contribute to rivalry intensity. In particular, SET management welcomes:

1) more collaborators to optimize the creation of net positive externalities

2) sustainable industries, where there is greater emphasis on creating and sustaining positive externalities than on pursuing financial growth for its own sake (e.g., SET management welcomes a decline in industries with net negative externalities, such as the conventional beef industry[38])

3) matched supply and demand so that everyone has enough with minimal excess or waste

4) all organizations collaborating together to optimize sustainability

5) fixed costs are reduced so that resources can be used as flexibly as possible to deliver a variety of goods and services in a socio-ecologically sustainable way

6) increased ability to integrate products and services, providing optimal choices to consumers

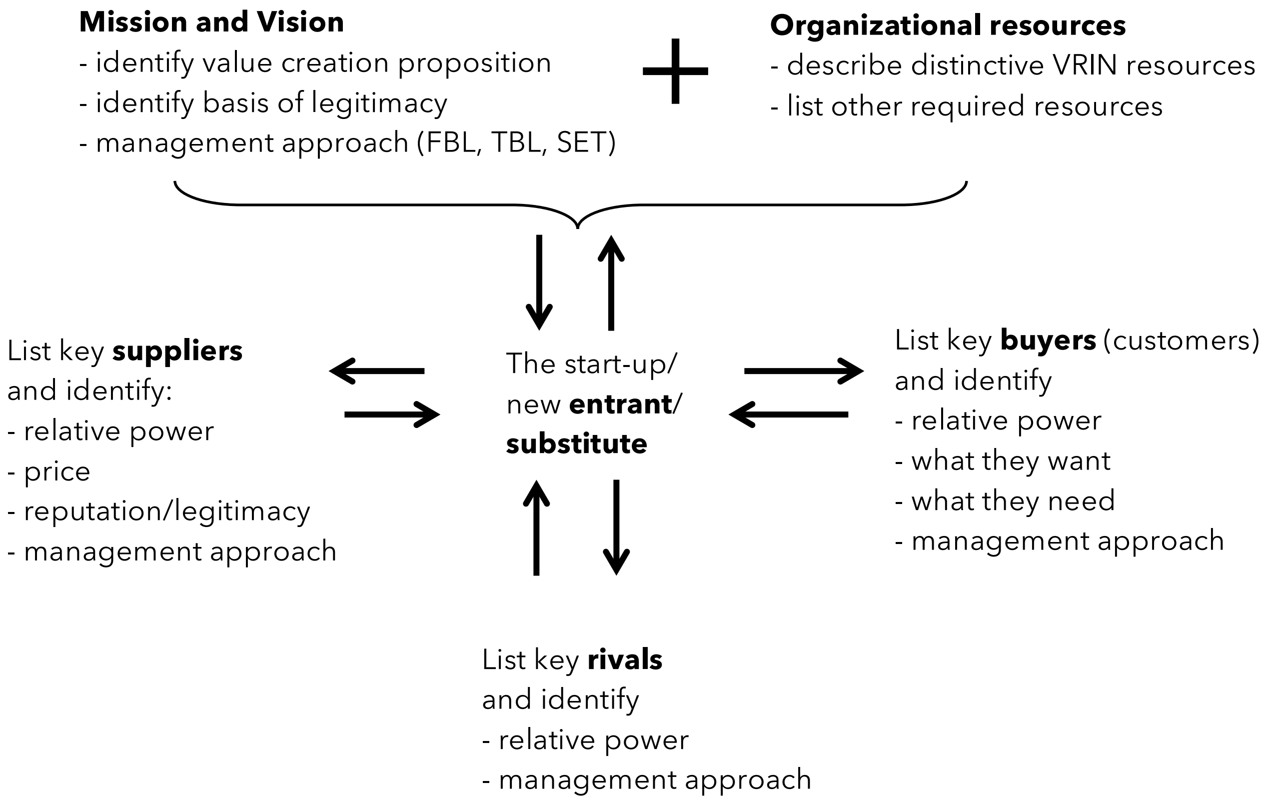
Collaboration is evident when Statoil and Aesnes cooperate to provide their "waste" heat for a fish farm, which in turn willingly provides fertilizer for farmers. It is also illustrated by three rivals in the green office buildings market—Delos, Overbury, and Morgan Lovell—forming a **strategic alliance,** *pooling their organizational resources and know-how to share the risks and rewards for developing their market*.[39] Strategic alliances will differ between FBL, TBL and SET approaches, depending on the rewards they are designed to create.

Finally, note that that the strategic management process is dynamic, not static. In other words, when it comes to strategic management, organizations never arrive at the best answer, but instead the best answer keeps changing. The mission and vision statements and SWOT analyses associated with Jack Welch's GE were different than his predecessors, and Jeff Immelt's were different than Jack Welch's. This dynamism underscores the need for entrepreneurship generally, which include intrapreneurship within existing organizations.

ENTREPRENEURS AND STAKEHOLDERS

We now look at how entrepreneurs can use tools from the first two steps of the strategic management process to develop a **stakeholder map**, *which is a description of the organizational resources a new start-up has (and needs) in order to manage the key forces (and key relationships it needs to establish) in its industry*. Recall that stakeholders are parties that have an interest in what an organization does because they contribute resources to the organization and/or are affected by its operations. A stakeholder map, as depicted in Figure 9.3, provides a blueprint that helps entrepreneurs to both understand the challenges they face, and to identify the key resources they require in order to meet those challenges.

Figure 9.3: Stakeholder map for entrepreneurial strategic management



STEP 1: ESTABLISH MISSION AND VISION

The first step in the strategic management process, establishing the start-up's mission and vision, helps entrepreneurs to identify what industry they will operate in. It is expected that the mission and vision may change as the start-up unfolds and as entrepreneurs improve their knowledge about the key stakeholders in the industry where they are starting their organization. For example, the mission and vision of Meechim was informed in part by Shaun Loney's understanding of what were the key forces at work in Garden Hill, which he learned about after he arrived.

The mission and vision also go a long way in developing the legitimacy of a new organization, which is key to establishing its success. In other words, the mission helps to identify the start-up's value creation proposition. What does the start-up contribute to an industry that merits it to be taken seriously by key stakeholders, such as potential investors, suppliers, customers, and the community? From an FBL perspective, this legitimacy will focus on the start-up's potential to generate strong financial performance, while a TBL firm will provide a business case that emphasizes profits but also addresses ways to reduce negative socio-ecological externalities. SET entrepreneurs will highlight the start-up's ability to create positive socio-ecological externalities.

STEP 2A: STRENGTHS & WEAKNESS (INTERNAL RESOURCES)

In this step, entrepreneurs need to think deeply about and spell out what resources the organization has that are valuable, rare, inimitable and non-substitutable. Does the organization have a novel idea or new patent that distinguishes it from existing organizations? Does it possess human resources with a particular or unique skill set? Does it have a particularly great location, or a noteworthy relationship with other organizations (e.g., exclusive distribution rights)? Does it enjoy tax advantages, or a funder with deep pockets? These resources should be listed and described.

In addition to identifying its distinctive core competencies, the entrepreneur also needs to identify the generic competencies required to operate in the industry. Many of these competencies will become clearer while analyzing the opportunities and threats in the industry. For example, for Meechim, it was key to have access to the 5 hectare parcel of land, and to sell products on the mainland within Garden Hill. Other resources, like labor to raise chickens and vegetables were important and necessary, but were not part of Meechim's distinctive core competencies.

STEP 2B: OPPORTUNITIES & THREATS (EXTERNAL RESOURCES)

This step lies at the heart of drawing the stakeholder map. Understanding the mission and vision (step 1) is important because it identifies the industry that a new organization will operate in, and understanding its internal resources (step 2a) is important because it describes the available and needed resources. But it is understanding the nature of the stakeholders via the five forces model that enables entrepreneurs to develop a deeper understanding of the key challenges and dynamics at play in their industry. This helps them to develop a richer understanding of their value creation proposition (step 1) and the resources they need to succeed (step 2a).

An important part of the stakeholder mapping process, which goes beyond Porter's five forces model, is to recognize the bi-directionality of the relationships between the stakeholders and the entrepreneur. Just as suppliers and buyers can and do exert force over a new entrant, so also a new entrant has power to influence suppliers and buyers. Indeed, that bi-directionality lies at the core of the dynamism and change that entrepreneurship offers. Whereas FBL management presents this bi-directionality in competitive terms (e.g., as a power contest among stakeholders), SET management sees it in collaborative terms (e.g., as an opportunity to establish mutually beneficial relationships among stakeholders).

Stakeholder maps *recognize the bi-directionality of the relationships between the stakeholders and the entrepreneur.*

We now examine the implications of drawing an entrepreneurial stakeholder map that builds and elaborates upon the five forces.

New entrant and/or substitute

It is not unusual for entrepreneurs to start a new business, only to learn about the various regulations that they must comply with when they are well into the process.

As a new entrant in an industry, the entrepreneur needs to be aware of barriers to entry. What licenses does the new firm need to operate in an industry? Are there regulations that limit what the entrepreneur can do? It is not unusual for entrepreneurs to start a new business, only to learn about the various regulations that they must comply with when they are well into the process. One entrepreneur likened it to jumping into a pool to swim to the other side, and halfway across finding out they need to tie weights to their legs and swim with only one hand. "If I knew at the start what I found out six months in, I wouldn't have jumped in in the first place."[40]

Because SET entrepreneurs are more deliberately aware of, and grounded in, the larger community, they may be more likely to be aware of regulatory and other barriers to entry. And because there are more stakeholders who benefit from SET start-ups, there will be more people providing help and counsel. In contrast, FBL entrepreneurs have a narrower agenda—maximizing their own financial self-interests—and will likely get the least support from the larger community. TBL entrepreneurs will be somewhere between the two.

Shaun Loney learned that Meechim could not sell any farm produce (crops or meat) outside of Garden Hills' borders without special permission from a government official. He also learned that the federal government subsidizes grocers like the Northern Store to fly in food to northern communities ($68 million for 100 communities), and that there were no subsidies available to grow healthy food locally, even if doing so would create jobs and reduce diet-related health care costs. Finally, note that Meechim might be more properly called a substitute than a new entry in the industry. Meechim grows its own food, and flies in other fresh fruits and vegetables, but it does not compete with the Northern Store as a full-fledged grocery store (e.g., Meechim does not sell many of the canned goods or cleaners and other items sold in a grocery store).

Rivals (competitors)

Entrepreneurs need to be very aware of their rivals and/or competitors. Rivals set constraints on what entrepreneurs can and cannot do. For example, entrepreneurs must consider rivals' prices and product lines when choosing their own organization's prices and product lines. The FBL approach assesses such constraints in financial terms. Because the FBL approach assumes a win-or-lose competition for relatively scarce customer dollars, managers need to keep up with competitors. If other organizations release new or improved products and services, the FBL entrepreneur must find a way to respond.

Similar dynamics are at work in TBL firms that do not welcome new competitors in their trading areas, and who take advantage of their own strengths to defeat them. Thanks to its huge purchasing power, Walmart can demand lower prices from suppliers than its competitors can.[41] In turn, Walmart can then charge lower prices to its customers than its competitors can. Indeed, Walmart has been accused of entering a geographic trading area and driving its existing smaller local competitors out of business.[42]

By their nature, SET entrepreneurs often do not compete directly with FBL and TBL firms. Rather, SET entrepreneurs offer a different value proposition. If a SET entrepreneur sells coffee and chocolate, it is likely to be fair trade and organically grown. In contrast to TBL firms like Walmart, in SET firms the retail employees who sell it are more likely to be paid a living wage. You can buy chicken at the Northern Store or at Meechim, but the Meechim chicken is grown locally and provides much-needed jobs in the local community. In this sense SET entrepreneurs are clearly different from their FBL and TBL competitors (this will be discussed further in Chapter 10).

By their nature, SET entrepreneurs often do not compete directly with FBL and TBL firms.

Suppliers

FBL entrepreneurs think of suppliers in financial terms, expressed colloquially as "buy low, sell high." This puts start-ups at a disadvantage against large incumbents like Walmart with its huge purchasing power and economies of scale. But FBL entrepreneurs have several strategies they could adopt. They could sell goods whose sales volume is lower than what would be carried by large competitors (e.g., custom goods in a niche market). Or, they could buy from suppliers whose quality and safety standards are not be acceptable to large TBL competitors. They could purchase raw materials and component parts from low-priced overseas factories that have questionable labor and safety practices, and sell them at a dollar store. Or they could offer services by outsourcing jobs to underpaid service providers (e.g., Uber drivers, staff in some low-end restaurants). Some of these strategies would, of course, be viewed as unacceptable by TBL and SET entrepreneurs.

TBL entrepreneurs may be in a somewhat similar situation, but may be able to find opportunities to compete with incumbents by choosing suppliers that offer customers a value proposition that customers are willing to pay extra for. This was the genius behind the growth of Whole Foods, which Amazon bought in 2017 for US$13 billion as part of Amazon's own intrapreneurial foray into the food industry.[43] Whole Foods enjoyed a competitive advantage over conventional supermarkets by developing a supplier network that enabled it to sell organic foods. Now that organic foods have gone mainstream, this window of opportunity is closed, but there may still be an opportunity for a "100-mile grocery store" which sells local and organic groceries. TBL entrepreneurs have an incentive to find and develop suppliers who will help them achieve a positive reputation. For example, in order to ensure that their suppliers' employees are paid a living wage and do not work with toxic chemicals, companies like Starbucks help coffee growers to create fair trade cooperatives, and companies like Walmart create incentives for suppliers to provide organic cotton or foods.

Both FBL and TBL entrepreneurs seek to control suppliers, but SET entrepreneurs are open to being influenced by suppliers and other stakeholders. Moreover, what the SET entrepreneur considers to be a supplier encompasses a wider scope than the other two approaches. In addition to direct suppliers of inputs, SET entrepreneurs pay attention to socio-ecological externalities associated with a supplier's suppliers. It is not enough to simply purchase fair trade goods from a wholesaler—Ten Thousand Villages wants to purchase directly from producers because this helps to establish a direct relationship valued by consumers.[44]

In addition to relationships with suppliers who provide tangible goods, it is also important to establish relationships with suppliers of social legitimacy.

Finally, TBL and SET entrepreneurs are particularly attuned to the fact that, in addition to developing relationships with suppliers who will provide tangible goods, it is also important to establish relationships with suppliers of social legitimacy. Indeed, SET firms often include positions on their boards for members of groups like non-government organizations. A **non-government organization** (NGO) *is a non-profit organization whose primary mission is to model and advocate for social, cultural, legal, or environmental change*. Along similar lines, when the Canadian TBL grocery giant Loblaw launched its "Green Line" products, managers sought advice from two NGOs[45] ("Friends of the Earth" and "Pollution Probe"). These NGOs suggested different products, evaluated the merits of different items, and made other recommendations regarding marketing strategies. The NGOs benefited from increasing socio-ecologically responsible choices available to consumers, and Loblaw benefited from the counsel and credibility of the NGOs.

Buyers (customers)

Customers *are the stakeholders who use the organization's products and services.* Paying customers are essential to business organizations because they provide the revenues needed to pay salaries to members, to purchase inputs from suppliers, and to provide financial returns to owners. In non-business organizations, other terms are used in place of customers. For example, soup kitchens have patrons, hospitals have patients, and schools have students. But whatever you call them, customers are the focal point of an organization's product and service outputs.

Entrepreneurs obviously want customers to choose their product or service. FBL entrepreneurs are primarily concerned with customers as a source of revenue, and tend to assume that customers are primarily concerned about their own economic well-being. Therefore, FBL entrepreneurs focus on convincing customers that their start-up is offering products or services that satisfy the customer's desires in the most convenient way and at the best price.

The TBL approach is similar, but distinguishes itself by emphasizing how products and services simultaneously satisfy customer desires and reduce negative socio-ecological externalities. Many consumers choose to shop at Whole Foods and knowingly pay higher prices because that company sells organic groceries and promises to pay employees a living wage.

SET entrepreneurs also need customer support, but take a different approach to developing it.[46] In particular, SET entrepreneurs emphasize building relationships, often inviting customers to be involved in the design or production of goods and services. Likewise, the prices in a SET organization reflect the actual costs involved, rather than an attempt to maximize profit. SET entrepreneurs want to enhance global social and ecological well-being, and assume that customers do as well. For example, the retail grocery store Neechi Foods refuses to sell cigarettes because of health concerns, sells local organic food and crafts in a way that allows customers to get to know the producers of the goods they are purchasing, is deliberately located in a low-income urban area that has few other healthy food choices, and provides space to local schools and groups for community-building activities. Rather than win customers through conventional marketing or offering the lowest price, SET-managed organizations attract like-minded customers with their reputations for ethical conduct and social responsibility.

Rather than win customers through conventional marketing or offering the lowest price, SET-managed organizations attract like-minded customers with their reputations for ethical conduct and social responsibility.

CHAPTER SUMMARY

1. The first two steps in the four-step strategic management process are (i) establish the organization's mission and vision, and (ii) analyze external and internal factors (SWOT analysis).

2. When establishing the organization's mission and vision (Step 1):

- FBL managers focus on financial well-being and competitive strategy, using a top-down process,
- TBL managers focus on the triple bottom line and competitive strategy using a mostly top-down process,
- SET managers focus on socio-ecological well-being and collaborative strategy using a participative process.

3. The first part of Step 2, analysis of internal factors, focuses on strengths and weaknesses in the organization. The Resource-Based View identifies resources that are:

Valued:	Enhances the ability to improve profits (FBL) Enhances the ability to improve the triple bottom line (TBL) Enhances the ability to improve socio-ecological well-being (SET)
Rare:	Enhances ability to achieve financial competitive advantage (FBL) Enhances ability to achieve TBL competitive advantage (TBL) Enhances feeling of responsibility to share with others (SET)
Inimitable:	Enhances opportunity for exclusivity/competitive advantage (FBL) Enhances opportunity for TBL competitive advantage (TBL) Creates responsibility to teach others (SET)
Non-substitutable:	Enhances opportunity for shareholders' financial security (FBL) Enhances opportunity for shareholders' financial security (FBL) Creates responsibility to secure stakeholders' net well-being (SET)

4. The second part of Step 2, analysis of external factors, focuses on opportunities and threats found in the organization's external environment. The five forces model identifies the following important external factors:

Supplier power:	Minimize dependence on suppliers (FBL) Minimize, unless supplier profitably reduces negative externality (TBL) Optimize relationships that enhance positive externalities (SET)
Buyer power:	Minimize dependence on buyers (FBL) Minimize, unless buyer profitably reduces negative externality (TBL) Optimize relationships that enhance positive externalities (SET)
Substitutes:	Minimize substitutes (FBL) Minimize, unless substitute profitably reduces negative externality (TBL) Welcome socio-ecological well-being enhancing substitutes (SET)
Barrier to new entrants:	Create/Maintain barriers to entry (FBL) Create, unless new entrant profitably reduces negative externality (TBL) Lower barriers that impede socio-ecological well-being (SET)
Rivalry:	Seek to reduce competition (FBL) Reduce, except when collaboration reduces negative externalities (TBL) Seek to optimize externality-improving collaboration (SET)

5. The first two steps of the strategic management process help entrepreneurs to develop a stakeholder map, which also highlights the dynamic role entrepreneurs play in the marketplace.

Questions for Reflection and Discussion

1. The world would be a better place if more entrepreneurs had the vision and mission of Shaun Loney, the SET entrepreneur who was described in the opening case. What problems are you aware of that actually represent opportunities for new start-ups?

2. Go on-line and find the mission and vision statement of three organizations, including one that seems to be managed from an FBL approach, another from a TBL approach, and a third from a SET approach. How consistent (or inconsistent) are these mission and vision statements compared to the nine elements described in this chapter? How do they compare relative to each other?

3. How common do you think communities of organizations like the one in Kalundborg are? What would need to happen to make them more frequent? What would need to happen to hasten the deliberate development of more "eco-industrial parks"[47] like the one that developed informally in Kalundborg?

4. Imagine an industry where most of the leading firms have an FBL approach to management. Imagine that you prefer a TBL approach. Use concepts from this chapter to think about how you would go about developing a strategy to enter this industry.

5. Write a vision or mission statement for your *professional* life. What is your ongoing mission, and what is your vision for 5 or ten years from now?

6. Write a mission and vision statement for your *personal* life. How much overlap is there between your professional and personal statements? Which set of statements has more influence over the kind manager you want to become?

7. Write a mission and vision statement for the organization for which you are creating an ESUP. How does it compare with your professional and personal statements? Is the organization you are designing a good one for you to work in? Will it help you to achieve your goals? If so, how? If not, what can you change to increase alignment?

8. Complete a stakeholder map for an organization you would like to start up.

SPACE TO WRITE DOWN YOUR REFLECTIONS & NOTES

PREVIEW AND SUMMARY OF CHAPTER 10

Steps of strategic management	FBL	TBL	SET
Step 3: Formulate strategy Generic strategies	Cost leader vs. Differentiator	TBL Cost leader vs. TBL Differentiator	Minimizer vs. Transformer
Portfolio matrices Two key criteria:	Market growth rate and market share	Sustainable development (TBL) and restorativeness (SET)	
Four-part typology:	Star; Cash cow; Question mark; Pet	Sustainability hero; Fragile player; Innocent bystander; Lavish actor	
Step 4: Implement strategy Preferred style: Secondary style:	Content is key: deliberate top-down emergent bottom-up	Content with process: deliberate top-down emergent bottom-up	Process is key: emergent bottom-up deliberate top-down
Entrepreneurship implications	Use industry analysis to update stakeholder map and formulate a business-level strategy		

CHAPTER 10:
STRATEGIC MANAGEMENT B:
FORMULATION AND IMPLEMENTATION

Learning goals

After reading this chapter, you should be able to:

1. Describe the final two steps of the strategic management process—formulation and implementation.

2. Understand the differences between the FBL, TBL and SET approaches to strategy formulation and implementation.

3. Describe the generic business strategies.

4. Explain what a strategic business unit (SBU) is and how a diversified organization is comprised of a variety of SBUs

5. Describe how managers of diversified firms decide which SBUs to add and remove from their portfolio.

6. Understand the key components of the strategy implementation process.

7. Develop an entrepreneurial plan for executing the final two steps of the strategic management process.

HOW A VISION LED TO A STRATEGY THAT HAS CAUGHT EVERYONE'S EYE[1]

Imagine that someone told you that they had an idea for a start-up business that would compete in a multi-billionaire industry, where one giant firm controls up to 80% of the market. That was the audacious vision of four business students from Wharton in February 2008, which resulted in them launching the on-line designer eyewear company Warby Parker two years later. At that time, the high-end eyewear industry was controlled by Luxottica, which designed, manufactured, and retailed eyewear, and which had annual revenues of about $7 billion. Luxottica developed and manufactured designer eyewear for major brands like Ralph Lauren, Chanel, and Armani.

The impetus for the idea of Warby Parker was three-fold. One of the four founders had told the others about how he had lost a pair of glasses just before the school year: a $700 mistake. He wondered why glasses should cost as much an iPhone. Another one of the four founders had previously worked for VisionSpring, a non-profit organization that improves access to glasses in India. The third impetus was the realization that people were buying all sorts of things from the internet: Why not eyewear?

Step 1: The mission of Warby Parker is "to offer designed eyewear at a revolutionary price, while leading the way for socially conscious businesses." It describes itself as "A lifestyle brand offering value and service with a social mission." This B Corp sells most of its frames for $95, and its "buy a pair, give a pair" business model—where each purchase results in a donation of glasses to someone in a low-income country—has already provided over one million glasses to people in low-income countries.

Step 2: In terms of SWOT, Warby Parker's key strength is its well-thought-out attention to customers, and its ability to make purchasing eyewear on-line as friendly and personal as possible. This key element of the brand distinguishes the firm from its competitors. A key innovation was paying all the shipping costs involved with sending 5 pairs of frames to customers to try on, which they then return and place an order for the pair they want. At first a weakness may have been a lack of bricks-and-mortar stores to interact with customers directly, but Warby Parker has now opened twenty storefront retail outlets, which have been very successful. In terms of opportunities, the high prices charged by Luxottica-related firms provided a pent-up demand for affordable designer eyewear, but at the same time such a dominant competitor also represents a threat, as do other start-ups offering eyeglasses on-line.

Step 3: Warby Parker's vertical integration and strategy of removing several layers of intermediaries from the supply chain has helped it to reduce financial costs. Its frames are designed in-house, it sources supplies like titanium and acetate, and manufacture takes place in China. The firm's emphasis on a personalized experience for customers has differentiated it from competitors. But perhaps the key feature is its social mission to enhance the well-being of people in low-income countries (Warby Parker also purchases carbon credits to reduce its carbon footprint to zero).

Step 4: The implementation of the strategy went so well—in part because it took almost two years from inception to finally offering its product to customers—that it could have sunk the firm. Realizing the importance of consumer awareness, and that there was only one chance to make a first impression, the founders interviewed over 40 Public Relations firms before they chose the team to design their launch. The launch itself featured stealth marketing that included inviting reporters at a big fashion event to a secret "hush mob" in a New York library, and an article in *GQ Magazine* that came out a few weeks earlier than expected. Within three weeks the firm had reached its first-year sales target, which was great except that it meant they had 20,000 customers on a waiting list to get their glasses. Personalized emails and explanations helped to establish the firm as an on-line firm with a human touch. Sales have topped $100 million, and the firm has been valued at $1.2 billion.

The information and insights generated while developing mission and vision statements and doing the SWOT analysis described in the previous chapter provide enable strategic managers to formulate and then implement their organization's strategy. These two important activities are the focus in this chapter, which will look at the Financial Bottom Line (FBL), Triple Bottom Line (TBL) and the Social and Ecological Thought (SET) approaches to management, and consider implications for entrepreneurship.

STEP 3: FORMULATE STRATEGY

Managers formulate strategies for organizations operating in a specific market, and for organizations operating in a variety of markets. We will look at each in turn.

GENERIC STRATEGIES

When most people think about organizational strategy, they usually think about a **business level strategy**, *which describes the combination of goals, plans, and actions that an organization in a specific industry uses to accomplish its mission*. For example, a trucking company like Reimer Express uses a business level strategy to compete in the transportation industry. Business level strategies are also used by managers of non-business organizations, such as a thrift store operated by the Salvation Army. While each organization will have its own distinct strategy, there are "generic" strategies that managers may adopt and adapt for their own organization.

The FBL approach to generic strategies

Michael Porter developed the two best known generic business level strategies: cost leadership and differentiation.[2] A **cost leadership strategy** *is evident when an organization has lower financial costs than rivals for similar products, thereby contributing to higher profit margins and/or a higher market share (via lower prices).* When cost leaders offer a portion of their financial cost savings to buyers, this can increase the cost leader's market share and allow it to achieve further cost savings as a result of greater economies of scale. Paying attention to production and distribution efficiencies is crucial if this strategy is adopted. Walmart became the leading retailer on the planet thanks to using a cost leader strategy. Internally, Walmart has a world-class inventory management system to lower costs. Externally, Walmart's volume purchases give it such great buyer power that it can purchase products from suppliers at lower prices than its competitors. As a result, Walmart can have higher profit margins on its products while at the same time pricing its products lower than its competitors, resulting in increasing market share and high revenues to finance its growth.[3]

A **differentiation strategy** *is evident when an organization offers products or services with unique features that cost less for it to provide than the extra price which customers are willing to pay for the features.* There are numerous ways an organization might differentiate its product or service from that of its rivals: exceptionally high quality, extraordinary service, creative design, unique technical features, generous warranties, and so on. The differentiation must be significant enough so that customers are willing to pay a higher price. A good example of differentiation is the lifetime service guarantee on Patek Philippe watches; the service guarantee can be made because the watches are built according to standards that go beyond even the strict specifications of the Geneva Seal. The firm's reputation enables it to charge tens of thousands of dollars for its watches.[4]

Porter also notes that it is important for managers to decide whether their strategy will have a narrow or a broad focus. A narrow **focus strategy** *means choosing a small segment of the overall market, such as a specific geographic area or a specific kind of customer.* For example, managers of a local pizza restaurant must decide whether to distribute flyers throughout the city or only in their local neighborhood, whether to create an ambiance that appeals to a broad cross-section of customers or to a particular sub-group (e.g., families vs. college students), which items to offer on the menu (e.g., pizza made from organic-only products), and so on. The focus strategy may be combined with either differentiation or cost leadership.

A **dual strategy** *is evident when an organization combines both a cost leader and a differentiation strategy.* Although Porter doubts the wisdom of such a strategy, others have argued that it is entirely possible to achieve. Indeed, even one of Porter's own examples of a cost leader strategy, Ivory soap, also has elements of a differentiation strategy (e.g., Ivory soup is 99.44% pure).[5]

The TBL approach to generic strategies

Generic strategies like cost leadership and differentiation may help to optimize an organization's financial bottom line, but they do little to optimize its social and ecological performance. Moreover, when an FBL organization uses a cost leadership strategy, it may find that it can reduce its financial costs by *creating* negative socio-ecological externalities. Michael Porter recognizes this problem, and has tweaked his approach to encourage practitioners to focus on creating shared value that addresses the socio-ecological crises facing humankind, even if this does not always enhance a firm's short-term profit.[6]

Generic strategies like cost leadership and differentiation may help to optimize an organization's financial bottom line, but they do little to optimize its social and ecological performance.

A **TBL cost leadership strategy** *is evident when an organization has lower financial costs than its rivals thanks to reductions in its ecological and/or social negative externalities, thereby contributing to its financial well-being.* Walmart has adopted a TBL cost leader strategy, by reducing its use of fossil fuels (e.g., by using a more fuel-efficient fleet of truck, by using LED lighting in its stores) and minimizing packaging; these actions reduce its financial costs and negative ecological externalities. While this is positive, Walmart is also known for not providing its employees with a living wage. In contrast, Costco—which employs a similar TBL cost leader strategy in terms of reducing packaging materials and by using solar energy—goes further by also seeking to pay its workers a living wage. Its hourly workers on average earn over $20 per hour, compared to the national average of $11.39 per hour for retail sales workers. According to Costco CEO Craig Jelinek: "I just think people need to make a living wage with health benefits … It also puts more money back into the economy and creates a healthier country. It's really that simple."[7] Costco is seeking to build an organization that will be here a generation from now.[8]

A **TBL differentiation strategy** *is evident when an organization offers products or services with socio-ecological features that cost less for it to provide than the extra price which customers are willing to pay for them*. For example, a recent study highlighted a dozen businesses with a TBL differentiation strategy in low-income countries that consistently generate above-average profit margins and growth rates.[9] TBL generic strategies can have a broad or a narrow focus, and it is possible to pursue a dual TBL strategy that combines TBL cost leader and TBL differentiation.

The SET approach to generic strategies

The SET approach uses two quite different generic strategies: minimizer and transformer.[10] A **minimizer strategy** *is evident when an organization minimizes negative socio-ecological externalities while ensuring that it remains financially viable.* The original blue box recycling programs were often started by concerned groups of people who wanted to minimize goods that went into landfills. Similarly, many of the organizations that have played important roles in developing alternative forms of energy were more concerned about reducing GHG emissions than about making a profit. The same is true for the 19th century organizations that helped rid America of slavery, or who helped reduce injustice by promoting gender equality and diversity (Chapter 13). Minimizer strategies may also be evident when groups of organizations work together as a community in order to reduce overall costs. For example, in Gussing, Austria, a biomass energy plant was collaboratively developed by a variety of organizations. The result was reduced unemployment, reduced GHG emissions, and reduced financial costs for the firms and for and the larger community.[11]

Glimpses of a minimizer strategy are often evident in the TBL cost leader strategy. However, unlike the TBL cost leader, the minimizer is not limited to reducing only those negative externalities that enhance on organization's financial well-being. Consider the explanation Bill Gates gives for why millions of children have died of diseases even when medication costs less than one dollar per person. He suggests that it is not in the financial interest of FBL and TBL companies to do anything to save the children: "The market did not reward saving the lives of these children, and governments did not subsidize it."[12] In other words, firms can make more money doing other things than helping these children. The increased flexibility that SET organizations enjoy precisely because they do not need to *maximize* profits gives them greater latitude to enhance value creation in areas of ecological and social well-being (e.g., helping the socially marginalized) that would not be considered profitable enough by FBL and TBL firms.

Bill Gates explains why millions of children have died of diseases for lack of medication that costs $1: "The market did not reward saving the lives of these children, and governments did not subsidize it."

Relaxing the need to maximize profits opens the door to a wider range of possibilities. Consider the story of inventor and entrepreneur Trevor Baylis, who recognized that many millions of Africans living in isolated areas would benefit from having a hand-cranked radio rather than one powered by expensive batteries. So Baylis invented a hand-cranked radio. However, because the intended customers were so poor, a business would not be able to maximize its profits selling the radios in this market. But with the help of other stakeholders, Baylis's radio was assembled in South Africa by factory workers with disabilities and sold in the villages at affordable prices. This entrepreneurial venture did not maximize the amount of money that Baylis could make, but it did provide him great satisfaction and created life-changing value for people who could listen to weather reports, news, and educational programming, and to the disabled workers who found employment building the radios.[13]

A **transformer strategy** *is evident when an organization creates positive externalities, often by adding value to resources that were previously under-appreciated or wasted.* A transformer strategy is evident, for example, in an organization that recycles tires and uses them to make garden hoses, office supplies, floor mats, and road surfacing.[14] A transformer strategy is also evident in volunteer agencies that encourage senior citizens to volunteer in after-school programs that help children with reading difficulties. Terracycle, Inc. was founded based on an ecological transformer strategy when founder Tom Szaky discovered he could profitably take waste from institutional kitchens (like the university where he was a student), feed it to worms, and sell the worms' excrement in used soda bottles as fertilizer.[15] Today Terracycle transforms ("upcycles") a wide variety of consumer waste items into marketable products,[16] working with school recycling programs and other large corporations who want their after-market packaging to be recycled into saleable products.

The hand-cranked radio did not maximize profits, but it did provide jobs and deliver news to the marginalized.

A **compounder strategy** *is evident when an organization simultaneously follows both a minimizer and a transformer strategy, thus reducing negative externalities and enhancing positive externalities.*[17] This is evident in an organization like Habitat for Humanity, which transforms waste via their ReStores and transform lives by enabling people who otherwise would not be able to afford it to live in their own homes. Another example: Greyston Bakery hires and trains chronically unemployable people, such as the homeless and ex-convicts, thereby enabling them to become valued contributors to society.[18] And it uses fair trade ingredients—including chocolate, vanilla, and sugar—to ensure that producers of these ingredients earn a living wage and use ecologically-responsible agricultural practices that enhance the well-being of the soil. Firms can work together in community to implement a compounder strategy; this allows them to create value together that they would not be able to create independently.[19] This is illustrated by the industrial ecological community in Kalundborg, Denmark, where different organizations transform each other's "waste" into valuable inputs, significantly minimizing waste and converting it into valued resources (Chapter 9).[20]

STRATEGIC MANAGEMENT FOR DIVERSIFIED ORGANIZATIONS

Our analysis thus far has looked at individual organizations that operate in a single industry. When such organizations are owned and governed by a larger diversified organization, they are called strategic business units. A **diversified organization** *competes in more than one industry or sector, or serves customers in several different product, service, or geographic sectors.* Often each separate division in a diversified company is treated as a **strategic business unit** (SBU) *which has its own mission statement, industry, products and services, business-level strategy, and financial statements*. General Electric is an example of a very large diversified organization. It has eight separate SBUs—power, renewable energy, oil and gas, energy management, aviation, healthcare, transportation, and appliances and lighting—each with revenues greater than $5 billion.[21] **Corporate-level strategy** *helps managers of diversified organizations decide which industries to compete in with an SBU.*

While large corporations often diversify their operations to compete in a number of different industries, smaller organizations may also face similar issues. For example, a small-scale vegetable farmer may sell fresh produce at a farmers' market, provide speciality produce to local grocery stores, sell farm-fresh salsa via the internet, provide a consulting service to other farmers or consumers, and rent out equipment and services to neighboring farms. The farmer might also decide to enter industries that offer year-round income (e.g., jams, pickled watermelon, writing books, even driving a school bus) to offset the seasonality of fresh produce. As another example, Habitat for Humanity has a division to build homes, another to operate its ReStores, another to purchase land, and another to manage mortgage payments.

In deciding what sort of diversification they want, managers can choose between two basic types of diversification strategies: (1) related, and (2) unrelated. First**, related diversification** *means expanding an organization's activity in industries that are related to its current activities.* For example, Maple Leaf Gardens Ltd., which owned the Toronto Maple Leafs hockey team, acquired the Toronto Raptors basketball team. Related diversification can be further divided into two types: horizontal integration and vertical integration. **Horizontal integration** *is evident when an organization's services or product lines are expanded or offered in new markets*. Managers choose to enter new industries based on how they can use existing strengths to their advantage, and grow their company. Horizontal integration is evident when a firm buys competitors in the same or similar markets who operate at the same level of distribution (i.e., retail level or manufacturing level). For example, retailer Hudson's Bay horizontally integrated by acquiring another retailer (Home Outfitters). And Bauer Performance Sports Ltd., a manufacturer of hockey sticks, horizontally integrated by acquiring Easton, which manufactures baseballs.

Vertical integration *occurs when an organization produces its own inputs (upward integration) or sells its own outputs (downward integration).* Managers facing strong supplier power may purchase a supplier (upward integration), while managers facing strong buyer power may purchase the buyer (downward integration). Major oil companies, for example, have grown through upward integration by getting involved in oil exploration, extraction, transportation, and refining operations. They have also grown through downward integration by operating retail gas stations. Another example of downward integration is when Wiens Family Farm opened a vegetable stand at a local farmers' market and organized a Community Shared Agriculture enterprise, rather than trying to sell their produce through grocery stores. Another example is Warby Parker, which designs its own frames (upward) and has opened retail stores (downward).

Second, **unrelated diversification** *occurs when an organization grows by investing in or establishing SBUs in an industry unrelated to its current activities,* as General Electric has done. Sometimes an unrelated diversification strategy is chosen to reduce a threat identified by a SWOT analysis. For example, managers may diversify if they believe that their current industry is in danger of declining, or if they believe diversification is critical to sustain growth. The cigarette manufacturer Phillip Morris diversified into a number of different industries after the Surgeon General announced that smoking causes cancer. Recently there has been a trend to move away from unrelated diversification, because unrelated business units can be difficult to synchronize with an organization's established core competencies.[22] **Divestment** *refers to the process of decreasing the number of industries in which a diversified firm operates an SBU.*

Portfolio management tools have been developed to help managers of **conglomerates** – *diversified organizations that have SBUs in unrelated industries*—to develop their corporate level strategy and decide which industries to remain active in, and which to divest from. These managers may treat their various SBUs like financial investments. Similar to individual investors who seek to diversify their personal investments, managers in conglomerates look for an optimal mix of types of SBUs and industries in which to operate. Portfolio matrices may also be valuable to entrepreneurs for choosing and understanding the dynamics of different industries they may enter. Portfolio matrices have also been helpful for understanding different markets and the life cycles of different products. For illustrative purposes, we describe only two possible portfolio matrices, one associated with FBL management, and the other more relevant for TBL and SET approaches.

Conventional portfolio matrix based on FBL management

Perhaps the best-known FBL tool for business portfolio planning was developed by the Boston Consulting Group and is called the **BCG matrix**, *which classifies each strategic business unit according to (a) its market share, and (b) the rate at which its industry is growing* (see Figure 10.1).[23]

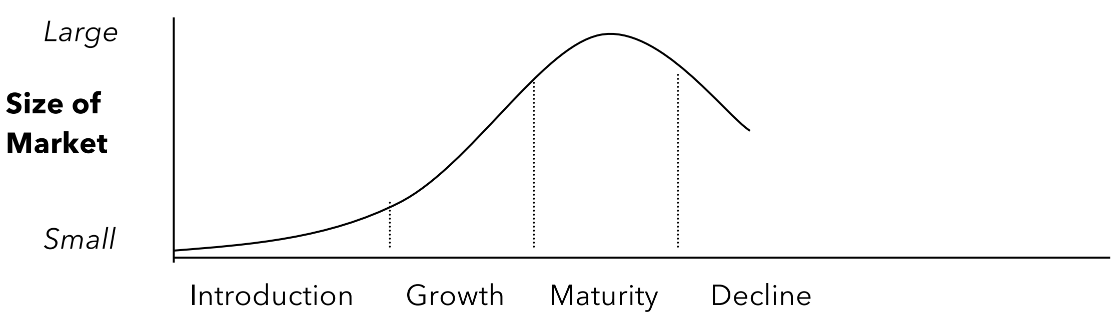
Figure 10.1: BCG portfolio matrix for managing diversified organizations

Market Growth Rate		Market Share: High	Market Share: Low
	High	*Star*	*Question mark*
	Low	*Cash cow*	*Pet*

Market share *refers to the proportional sales a particular SBU has relative to the entire industry*. An SBU that enjoys a 10% or greater share of the market in its industry is rated as being high.[24] The **market growth rate** *refers to whether the size of a particular market is increasing, decreasing, or stable.* This is an indicator of an industry's strength and future potential. A growth rate of 15% or more is considered high.

The product life cycle helps managers to understand the market growth rate dimension of the BCG matrix. The **product life cycle** *consists of four phases in the life of a product or service: introduction, growth, maturity, and decline* (see Figure 10.2).[25] In the first phase, introduction, there is low demand for the new product, and its future is uncertain. Not all products make it into the second phase (growth), when demand for the product really takes off. During the growth phase, the costs of building the organizational capacity to meet customer demand may create cash-flow problems. But organizations that can afford to invest in production capabilities may gain significant market share in a growing market. Third, during the maturity phase, the demand for the product levels off, some competitors are forced to drop out of the market, and intense competition motivates the remaining companies to differentiate their products and services from those of their competitors. This might be the stage mainstream eyewear products and services are in, but a start-up like Warby Parker with a differentiation strategy may be able to succeed nevertheless. In the decline phase, demand and profitability drop, and the advantage goes to the most cost-efficient competitors.

Figure 10.2: Product life cycle



Similar to products, industries can also be characterized as experiencing early growth, accelerated growth, slowing growth, and declining growth. Industries with increasing or high growth rates are more attractive. It is also helpful for managers to know whether an industry or product is: emergent (e.g., new kinds of product or services, such as the ethical investing industry), mature (e.g., long-standing products or services like beer, cement, oil, and banking), fragmented (e.g., includes a variety of industries, farmers' markets) or global (e.g., has a world-wide reach, such as automobiles and soft drinks).

Dichotomizing each of the two basic dimensions of the BCG matrix yields four types of organizations. A **star** *enjoys a high market share in a rapidly growing industry*.[26] Like movie stars, such businesses generate a lot of cash but also need a lot of cash to keep going. A star has a high profile and promises to generate profits and positive cash flows even after the growth of the industry stabilizes. Within the portfolio of Apple Inc., iPhones have long been a star, enjoying a strong market share in what has been a growing industry.[27] However, as the industry growth levels off, the iPhone will turn into a cash cow. Some wonder whether Apple will be as effective at finding its next "star" without Steve Jobs at the helm; for example, it seems unlikely the Apple Watch will be that star.

A **cash cow** *enjoys a high market share in a low growth or mature industry.* Within Apple's portfolio, iTunes can be considered a cash cow, thanks to it having 60% of the market share in its industry, but the industry itself has not been growing.[28] BCG suggests that cash cows should be "milked" and the profits invested in other SBUs within the portfolio that are "stars" or "question marks."

A **question mark** *has a low market share, but operates in a rapidly growing industry.* A question mark presents a difficult decision for management, as the risk of no return on the investment is very real. In the end, only those question marks with the most likely chance of success should be invested in. For example, Apple's attempt at introducing products like AppleTV, while enjoying some level of success, are still question marks in terms of whether they will become a star in the growing market of alternative television service providers.

Finally, a **pet** *has both a low market share and low growth potential.* Pets[29] typically produce little or no profit and have little potential to improve in the future. Pets should be sold off if a turnaround is not possible, unless the pet offers synergies with other products. **Synergy** *occurs when the performance gain that results from two or more units working together—such as two or more organizations, departments, or people—is greater than the simple sum of their individual contributions.* A large vegetable gardener may not make much profit operating a stand in a farmers' market, but may continue to do so if this helps it gather information about consumer purchasing patterns. In Apple's portfolio, the iPod has run the full cycle in the BCG, starting off as a question mark, becoming a star, then a cash cow, and now a pet.

The strength of the BCG grid is that it helps managers make strategic decisions by focusing on two important and practical dimensions. It also offers a simple conceptual framework to think about portfolio decisions for managers, about which industries or product lines to enter and to exit, and about how to transfer profits earned by a product or SBU in one quadrant (e.g., a cash cow) into another SBU in a different quadrant (e.g., a star or a question mark). However, the BCG portfolio matrix is limited since it focuses exclusively on market share and market growth as indicators of success and industry attractiveness.[30]

An alternative portfolio matrix based on TBL and SET management

The BCG matrix ignores issues of socio-ecological well-being.

From a TBL or SET perspective, a significant weakness of the BCG portfolio matrix is its total disregard of issues related to socio-ecological well-being. This shortcoming can be addressed by developing a 2 x 2 framework that is relevant for TBL and SET managers (see Figure 10.3).[31] Of particular interest to TBL, the vertical dimension is sustainable development, which focuses on how effectively an industry reduces its socio-ecological negative externalities. Managers who are interested in reducing or minimizing negative *ecological* externalities will be less attracted to, say, the conventional automobile industry and more attracted to software that enables virtual travel (e.g., tele-work and virtual meetings). Managers who are interested in minimizing negative *social* externalities will be less attracted to the garment industry (because many workers are poorly paid) and more attracted to the software development industry (which has relatively good working conditions). For some industries there is considerable debate about sustainability, such as whether hydro or wind power is more sustainable in the long-term. At other times there is general agreement, such as coal being less sustainable than hydro or wind power.[32]

Figure 10.3: A TBL/SET corporate strategy portfolio matrix

Sustainable Development		**Restorativeness: Low**	**Restorativeness: High**
	High	*Innocent bystander*	*Sustainability hero*
	Low	*Lavish actor*	*Fragile player*

The horizontal dimension, restorativeness, is of particular interest to SET managers. Restorativeness refers to how well organizations in an industry enhance positive externalities. A high level of restorativeness is evident in industries where organizations enhance the socio-ecological well-being of stakeholders. An industry would score low in ecological restorativeness if it emits a lot of pollution and greenhouse gases (e.g., automobiles), while another industry would score high if it takes carbon out of the atmosphere and sequesters it in the soil (e.g., Conservation Agriculture). Industries would score low in social restorativeness if they create stressful working conditions (e.g., computer and smart phone assembly plants in China), and score high if they enhance mental health (e.g., Big Brother/Sister organizations, national parks, and retreat centers).

Dichotomizing these two dimensions—sustainable development and restorativeness—yields four types of organizations. A **sustainability hero** *reduces or minimizes negative externalities (high sustainable development) and enhances positive externalities (high restorativeness).* An example of an *ecological* sustainability hero is an organization that provides curb-side composting services which reduces organic waste in landfills (where releases methane gas), and instead waste is composted and returned to the soil to provide nutrients to grow healthy food. An example of a *social* sustainability hero is a seniors' center where retired people can participate in physical activities, adult education, and after-school programs that help children with reading difficulties.

Managers may also wish to diversify by investing in an **innocent bystander***, which has high sustainable development but low restorativeness.* Garden centers and tree nurseries are innocent bystanders insofar as they produce minimal waste, but also do little to transform existing waste that is generated by others. However, if an infrastructure were developed so that garden centers could receive material for composting that might otherwise end up in a landfill (e.g., "wastes" from restaurants), then they could take a step towards becoming more of a sustainability hero.

A **fragile player** *creates both positive and negative externalities.* For example, the Children's Wish Foundation provides trips to Disneyland for children with life-threatening illnesses. This provides positive social externalities (joy and respite for the families), but also creates a negative ecological externality (pollution due to air travel).

Finally, **lavish actors** *are low on both sustainability and restorativeness*. Lavish actors represent great opportunities for positive change, either from within or by rendering them obsolete. For example, the Statoil oil refinery in Kalundborg, Denmark was at one time a lavish actor that created ecological waste while doing little to transform the waste of others. Now managers at the refinery have begun to utilize "waste" steam from the coal plant, and have improved their refinery's filtering process to emit less wasteful sulfur gas and instead provide sulfur inputs valued by neighboring companies. However, it might be even better if the oil refinery were made obsolete by solar energy.

Using an alternative matrix like this—in contrast to the conventional BCG portfolio matrix—provides a very different frame of reference with regard to choosing which industries to enter, and how to move funds from an SBU in one quadrant to an SBU in another, and what sorts of products to invest in or bring to market. This matrix can also be used in non-business organizations. For example, imagine what would happen if governments used the matrix—with its explicit attention on sustainable development and restorativeness—to make decisions about the services they provide with respect to waste removal, caring for seniors, education, health care, and so on. That could unleash powerful forces to increase the sustainability of how we live.

STEP 4: IMPLEMENT STRATEGY

Once the overall vision for an organization has been established (step 1), the SWOT analyses completed (step 2), and an appropriate strategy selected and developed (step 3), it is time to implement the strategy. The first three steps of the strategic management process could theoretically be completed by top managers on their own developing the content of their organization's strategy. But the fourth step—implementation of a new strategy—demands cooperation from others in the organization and among its stakeholders. As a result, the first three steps can be seen to focus on the *content* of the strategy, whereas the fourth step focuses on the *process*.

Strategy implementation may be relatively easy when managers are attempting to fine-tune an organization's existing strategy, but it is much more difficult when an organization is trying to introduce a major new strategy. Only 15% of major strategic changes are successfully implemented.[33] The implementation stage requires ensuring that the strategy fits with an organization's structures and systems, and requires skills in managing organizational change processes (we examine both of these topics in more detail in subsequent chapters). The focus in the remainder of this chapter will be on the importance of strategic learning when implementing strategy: **strategic learning** *refers to using insights from an organization's actual strategy to improve its intended strategy.*

AN EXAMPLE: HONDA MOTORS

In order to understand the importance of strategic learning, it is helpful to review a famous case study that describes the successful entry of Honda motorcycles into the U.S. market back in the 1960s.[34] According to the case (which was published by the Harvard Business School), Honda's story provides excellent support for following the four-step strategic management process, and how this can lead to success. This description is shown in the left column of Table 10.1; we'll get to the alternate interpretation shown in the right column in a bit.

Table 10.1: Case studies describing how Honda became #1 in the U.S. motorcycle market

As described in a Harvard Business School case (consistent with the content school)	As described by the managers from Honda who were involved in entering the U.S. market (consistent with the process school)
Step 1 (**Vision**): The vision of Honda's top management team was to be #1 in the U.S. market.	**Step 1 (Vision)**: The managers who oversaw the process said that Honda's goal at that time was to "sell something" in the U.S. market.
Step 2 (SWOT analysis): Honda's competitors were focusing on the "black-leather jacket" market; Honda saw an *opportunity* to target "everyday Americans." Honda had developed a smaller motorcycle in Japan, and it enjoyed economies of scale in producing it (a *strength*).	**Step 2 (SWOT)**: Honda had enjoyed success winning motorcycle races, and managers thought there was an *opportunity* for them to compete against the large muscle bikes in the U.S. market. A *threat* was that the market had established competitors. A *weakness* was evident when its big bikes initially broke down in the U.S. (e.g., due to be driven over much longer distances than in Japan). Engineers solved the problem (a *strength*).
Step 3 (Formulation): Honda managers chose a cost leadership strategy that took advantage of Honda's lower costs and economies of scale in making smaller bikes, and chose to focus this strategy on the untapped market of "everyday Americans."	**Step 3 (Formulation)**: Honda's intended strategy was to compete head-to-head with Harley-Davidson by selling large bikes to black-leather-jacket customers. When the retailer Sears expressed interest in selling the smaller bikes that Honda employees had brought along for their own travel, Honda said it wasn't interested (it didn't want to tarnish its reputation among the black-leather-jacket riders by placing such a small bike on the market).
Step 4 (Implementation): With a well-designed strategy and plan in place, Honda was the industry leader within four years after it entered the U.S. market. During that same period, Harley-Davidson fell from #1 to #4.	**Step 4 (Implementation)**: Honda's original strategy failed badly due to its big bikes breaking down, retail outlets not embracing the Honda product, and lack of interest among American black-leather-jacket bikers. Desperate to generate sales and cash flow, Honda's salespeople began to sell the smaller lightweight bikes. Seeing the potential in this emergent strategy, Honda adopted the slogan "You meet the nicest people on a Honda"[35] on the advice of its U.S. team (even though the President of Honda was personally opposed to the idea).

The lesson from the Harvard Business School case study of Honda's success is that strategy-makers who have a compelling vision, who perform a careful SWOT analysis, and who choose an appropriate generic strategy and then implement it, will achieve competitive advantage and prosper. This version of Honda's story is consistent with what has been called the content school approach to strategy. The **content school** *emphasizes the rational-analytic, top-down, and linear aspects of strategy formulation.* From a content school perspective, strategic management is a science that students can learn in business schools.

In contrast, the Honda managers who were actually involved in the case tell a very different story (see the right column in Table 10.1). The first-hand experiences of the managers are more consistent with the **process school**, *which emphasizes that strategy formulation and implementation are ongoing and iterative, where one aspect influences the other.* The process school tends to be more closely aligned with a SET approach that emphasizes process and bottom-up learning, while the content school is more aligned with FBL management's top-down approach (TBL management is somewhere between the two). However, the process school is also relevant for the FBL approach, just as the content school is relevant for SET management.

The lesson of the process school version of the Honda story—which differs sharply from that of the content school—is that success awaits managers who are able to learn from their mistakes, and from unplanned ideas that emerge in the everyday operations of an organization. The process approach places much more emphasis on the "art" or "craft" of management, rather than the "analytical science" of management.[36] From a process school perspective, the most important work of strategic management is not mastering analytical tools to formulate a strategy (hallmarks of the content school), but rather to develop skills in strategic learning, especially during the strategy implementation stage. The key to strategic management is learning from other stakeholders and identifying the emerging patterns in the "stream of actions" that make up organizational life.

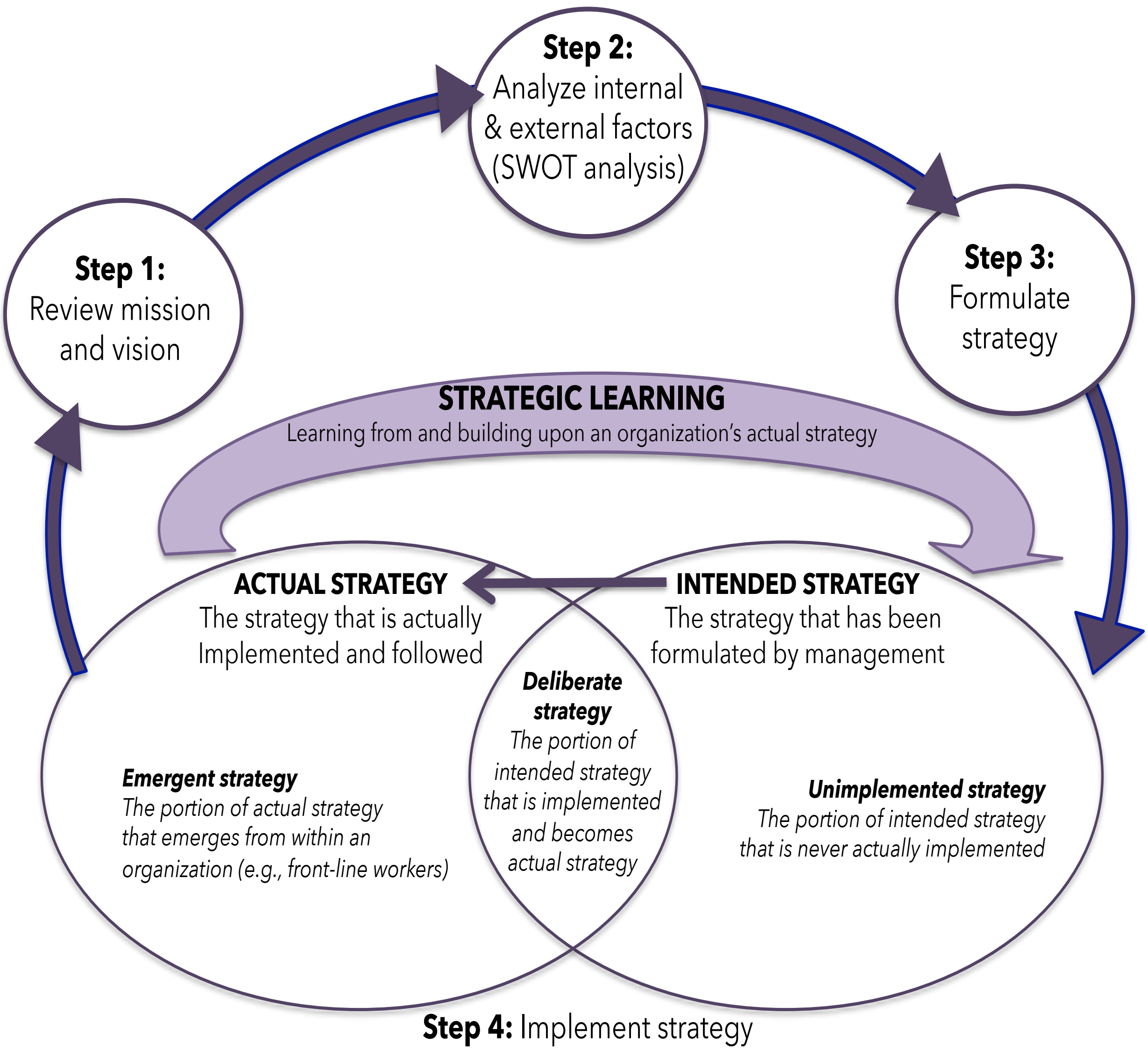
The key to strategic management is learning from other stakeholders and identifying the emerging patterns in the stream of actions *that make up organizational life.*

STRATEGY IMPLEMENTATION AS STRATEGIC LEARNING

The conceptual framework depicted in Figure 10.4 shows how strategic learning fits within the four-step strategic management process. In order to understand strategic learning, it is important to recognize the difference between an organization's **intended strategy** (*what managers want to do*) and its **actual strategy** (*the strategy that is actually implemented*). The first three steps of the strategic management process help managers to formulate the intended strategy that they want to implement. The **deliberate strategy** *refers to parts of the intended strategy that are implemented*, while the **un-implemented**

strategy *refers to aspects of this intended strategy that never get put into practice*. The deliberate strategy is only one part of an organization's actual strategy. The other part of the actual strategy is called the **emergent strategy,** *which refers to actions taken by organizational members that were not anticipated at the outset by managers*. The emergent strategy captures the idea that an organization's actual strategy depends, in part, on the bottom-up actions of front-line organizational members, and on how they respond to other stakeholders in the implementation stage. In the Honda example, the emergent strategy was selling smaller lightweight bikes and targeting everyday Americans, ideas that top management were initially opposed to (and also ideas that were foreign to other competitors in the U.S. motorcycle market).

Figure 10.4: Strategic management process, with focus on strategic learning in step 4



Strategic learning demands focusing on three things. First, managers try to understand *why* some of their original intended strategy was not implemented. In the Honda example, it meant sending motorcycles back to Japan in order to improve the technology for driving the longer distances that were common in the U.S.

Second, managers identify elements of the (unintended) emergent strategy that have positive outcomes for the organization. Sometimes emergent strategies are very visible and hard to miss. Often though, emergent strategies will be difficult to see simply because they are not expected. As illustrated by Honda's "You meet the nicest people on a Honda" slogan, often the strategy will be formulated by front-line members and then subsequently "blessed" by top managers. This happens because workers further down the hierarchy have a more direct knowledge about the issues at hand.

Third, managers determine the implications of this analysis for the organization's subsequent intended strategy. If a previously-developed intended strategy is not working, then it is important to reconsider the information and assumptions underlying the original SWOT analysis. This may be difficult because it involves challenging assumptions and strongly held worldviews in an industry. From a process school perspective, strategic management is not like a "brain" that performs rational scientific analysis and then *tells* the rest of the members in the organizational body what to do. Rather, strategic management is more like a brain that is the focal point of the central nervous system, and which *listens to and learns from* the unexpected signals that it receives from its members. Thus, strategic managers are not "smarter" than other members in the organization. Rather, thanks to their unique position at the top of the organization, strategic managers have access to a comprehensive bundle of information that they must use responsibly.[37]

Strategic management requires listening to and learning from the often unexpected signals that come from stakeholders.

FBL, TBL, AND SET APPROACHES TO STRATEGIC LEARNING

There is a long-standing debate about the best process to use when implementing strategy. While there is considerable variation, generally speaking FBL management tends to place greater emphasis on a deliberate top-down approach to the strategy process, including the implementation step.[38] In contrast, TBL management seeks to balance a deliberate top-down approach with an emergent bottom-up approach, with a particular emphasis on learning from members lower down in the hierarchy. SET management places even greater emphasis on the emergent bottom-up approach, and includes learning from members as well as external stakeholders.[39]

ENTREPRENEURSHIP IMPLICATIONS

In the previous chapter, we applied the first two steps of the strategic management process to the context of start-up organizations, highlighting the issues that entrepreneurs should consider in their planning. In this section, the entrepreneurial application continues. Having established a mission and vision for a potential new organization, an entrepreneur can consider the sort of strategy that would best achieve that organizational goal. However, as Figure 10.4 makes clear, strategic management is an iterative process, with information from each step influencing choices at every other step. We will therefore revisit Step 2 (SWOT analysis), adding information based on the new concepts in this chapter, before proceeding to the final two steps.

For clarity and simplicity, this section does not address diversified organizations (i.e., corporate-level strategy). Doing so should not be taken as evidence that entrepreneurs do not diversify. Many do, and in fact current wisdom suggests that modern entrepreneurs should pursue multiple income streams.[40] Elon Musk, for example, is a high-profile entrepreneur who has at times led multiple new start-ups simultaneously. However, serial entrepreneurship, in which the entrepreneur starts one organization before starting the next, is more common. And even when entrepreneurs start more than one organization at the same time, those organizations are typically independent of each other. In light of these observations, the discussion below focuses on strategic management of a single organizational mission.

STEP 2 REVISITED: ANALYZE INTERNAL & EXTERNAL FACTORS

Recall that a business strategy consists of goals, plans, and actions designed to accomplish an organization's fundamental purpose. That fundamental purpose determines which industry the organization will be operating in, and therefore what issues are important in a SWOT analysis. The tools in this chapter deepen the entrepreneur's ability to do such an analysis.

Entrepreneurs need to develop a stakeholder map, as described Chapter 9, but those stakeholders must be assessed in the context of their industry. As noted above, industries predictably move through life-cycle stages, and those stages have important implications for new entrant success. The implications of specific number and size of competitors, for example, are different at different stages. Having many competitors in an early growth industry is likely to signal an opportunity; it suggests that barriers to entry are low and that the industry has not yet settled on standards or dominant players, so there is still room for a start-up to enter and shape the industry. In contrast, if there are many competitors in a mature industry with limited growth prospects, then it will be harder for a new organization to capture customers; this representing a threat. Likewise, a growing industry with few suppliers may represent an opportunity to work with others to develop new suppliers and establish beneficial relationships with them. But a limited number of suppliers in a large established industry is likely a threat, either in terms of supplier power or difficulty in finding suppliers to work with.

The implications of industry-specific stakeholders will also vary based on the management approach the entrepreneur adopts. For FBL entrepreneurs, developing new suppliers carries a risk of profit-reducing inefficiencies because of the costs involved in the development process. An FBL entrepreneur would likely only see developing new suppliers as an opportunity if doing so provided some valuable resource in return (e.g., inimitable input features, beneficial long-term contracts, etc.). In contrast, a SET entrepreneur may see an opportunity in developing a new supplier because doing so would create a strong working relationship, allow the start-up to benefit from the suppliers' expertise, and provide the chance for the supplier to be influenced toward practices that create positive socio-ecological externalities. For example, *31 bits* works closely with its Ugandan producers and jewelry designers to develop products that enhance socio-ecological well-being.

Another important consideration in a SWOT analysis is the nature of the substitute products or services that are available. While traditional portfolio analysis is usually thought of as a tool for diversification in an existing organization, it also offers a useful framework for entrepreneurs to assess opportunities and threats that they face as new entrants. Entrepreneurs adopting the FBL approach can identify opportunities and threats by assessing rivals' products and services in terms of the BCG matrix. This requires asking questions like: "What are the features of the current products in the market"? "What features would be needed to gain market share"? For example, cash cows are highly lucrative products that are likely to be central to an organization's operations. An entrepreneur should therefore assume that a competitor who has a cash cow product will be highly motivated to defend that product from substitutes. It may be possible to topple an existing cash cow, but doing so requires a different strategy than if the entrepreneur is entering an industry filled with stars and question marks. For example, Warby Parker did not compete head-on with Luxottica, but rather via offering a new value proposition that had a social component ("buy a pair, give a pair") and a new mode of delivery (personalized on-line).

SET entrepreneurs consider similar issues, but using their own standards (i.e., the alternative portfolio matrix). SET entrepreneurs are less concerned with out-competing incumbents, but they nonetheless must assess the industry they are entering to determine if an opportunity exists. For example, if an entrepreneur's mission refers to an issue that already has a well-established Sustainability Hero, launching a new organization may not be viable. This fact highlights an important difference between the FBL and SET approaches. A clever FBL entrepreneur may find a way to steal market share from an established cash

Warby Parker did not compete head-on with Luxottica, but rather via offering a new value proposition with a social component ("buy a pair, give a pair") and a new mode of delivery (personalized on-line).

cow, but most SET entrepreneurs would likely not try to out-compete an established sustainability hero. Even if it could be done, it might not make sense to drive Habitat for Humanity out of business to replace it with another organization serving the same ends; the resources used in that competition may have been better directed toward some other goal. As a result, industries dominated by innocent bystanders and lavish actors are likely to offer more opportunities.

STEP 3: FORMULATE STRATEGY

Having established a mission and conducted a SWOT analysis (including an industry and portfolio assessment), entrepreneurs must then specify exactly how they will create or capture value. The distinction between *creating* value and *capturing* value is an important consideration. Capturing value potentially can be done without creating much new value, as in the example of a hypothetical entrepreneur stealing the market share of a competitor's cash cow, or of the quadrillion-dollar global derivatives market. However, most entrepreneurs will be creating value of some sort, and thus need to define their **value proposition**, *which is a statement of why a customer should choose the organization's specific product or service*. A value proposition explains what the organization does that is desired by the customer. Value propositions are often stated explicitly in a form that combines aspects of vision and mission statements as well as strategy. Toward this end, an organization might use a template like this one: [Product/service] helps [target customer] to [target's need/goal] by [organizational contribution].[41] For example, a university course in management might have a value proposition promising that MGT123 helps *students* to *succeed in organizations* by *giving them skills and knowledge that will allow them to understand, interact, and take action more effectively*. Whatever form it takes, entrepreneurs need to define how their organization creates value.

A value proposition states why a customer should choose an organization's specific product or service.

Having identified their value proposition, entrepreneurs can then choose a generic business strategy. Of course, generic business strategies are only categories, and the entrepreneur will need to define specific goals and actions within that category. But choosing a generic strategy provides an important framework for developing a more specific strategy. Choosing an appropriate generic strategy depends upon the outcome of the previous steps and the entrepreneur's management approach. The choice must fit the entrepreneur's goals and the environment in which it will be pursued.

FBL and TBL entrepreneurs typically choose either a cost leader or a differentiation strategy. In general, the resources available to the entrepreneur will help to determine this choice. Cost leadership requires the ability to produce goods for less than competitors. Access to enough capital for large-scale operations or to low-cost inputs is therefore essential, and to provide competitive advantage this access must not be readily available to competitors. As a result, cost leader entrepreneurial initiatives are often intrapreneurial in nature, using the resources of an established firm. For example, Tesla Inc., which produces electric cars, began with a differentiation strategy selling the high-priced Models S and X, and when those cars were successful, used the brand recognition and profit they generated to launch the less expensive Model 3. In the absence of such resource advantages to support cost leadership, FBL and TBL entrepreneurs will likely choose a differentiation strategy. Indeed, this is the generic strategy that most people think of when they imagine an entrepreneur—the upstart inventor or young business person who has a grand idea for a new and improved product.

Because of their different priorities, SET entrepreneurs likely have more opportunities available to them. The historical dominance of the FBL approach has led to far more attempts to start organizations that become cash cows than to become sustainability heroes. One does not have to look very hard to identify significant social or ecological problems, and any of these problems can be the basis of a SET entrepreneurial start-up. Whether they adopt a minimizer strategy that improves on current FBL methods to reduce externalities, or a transformer strategy that taps a previously overlooked resource to create positive outcomes, SET entrepreneurs do not need to worry about defeating the incumbents to become the largest organization. They only need to make enough money to operate sustainably.

One does not have to look very hard to identify significant social or ecological problems, any of which can be the basis of a SET entrepreneurial start-up.

STEP 4: IMPLEMENT STRATEGY

The remaining chapters of this book are devoted to issues related to implementing a manager's selected strategy, and each of those chapters also addresses how the issues pertain to entrepreneurs. Organization structure and design, motivation, leadership, teams, communication, and control systems are all essential parts of realizing an organizational strategy. How entrepreneurs approach these activities is shaped by their management approach, and whether they follow the content school or the process school.

For many FBL entrepreneurs, the content school is the default model. As described in Chapter 6, the FBL approach tends to view the environment as a fixed quantity that is divided up among competitors. As a result, entrepreneurs must find an opportunity and then develop a strategic plan for taking advantage of it. This top-down perspective is part of the reason that the traditional business plan is so detailed and regimented. To receive funding and legitimacy, the FBL entrepreneur must explain the business case for the proposed new venture, describing a complete plan in advance. The FBL ideal is to develop a business plan in such detail that both emergent and unimplemented strategies are minimized because they create inefficiencies, waste resources, increase costs, and reduce profit. A key to FBL entrepreneurial success, therefore, is gathering and analyzing enough information to make useful predictions. This is also true for TBL entrepreneurs who seek traditional sources of financial, which requires them to make a strong business case to support their initiative to reduce negative socio-ecological externalities,

In contrast, SET entrepreneurs are likely to favor the process school because they are tackling significant social or ecological problems that may have a large scope. SET entrepreneurs know that problems like these cannot be solved alone, so they favor partnership and collaboration. Because of its inherent give-and-take nature, collaboration leads to more emergent strategy. Recognizing this fact, SET entrepreneurs may develop a less detailed initial strategy, choosing instead to gather input from stakeholders and to respond to opportunities as they arise during implementation.[42] While the FBL approach might see this open-endedness as a lack of preparation, it has the potential to make the start-up more responsive to issues that arise.

SET entrepreneurs may develop a less detailed strategy initially, opting instead to emphasize strategic learning during the implementation phase.

Evan Williams, the co-founder of the news and social networking service Twitter, has publicly lamented the bullying, trolling, and abuse that has become so common on his own and other internet platforms.[43] Some people have suggested that the problems Twitter is facing could have been anticipated and prevented if the team that designed it had been more diverse or had more conversations with diverse stakeholders.[44] Because the designers were a relatively homogenous group, they communicated and worked well together, which contributed to the *efficiency* that FBL desires. However, that efficiency came at the expense of diverse opinions and significant disagreements, and so the designers did not consider the inappropriate uses that might be made of Twitter. Whereas Twitter is clearly effective in terms of metrics like wide-spread use, it is not as effective in terms of preventing unwanted and unanticipated negative externalities (e.g., online bullying). The SET approach is willing to sacrifice some efficiency (in order to get more diverse input) in return for getting greater socio-ecological effectiveness (i.e., social media that has fewer negative social externalities).

Chapter Summary

1. The last two steps in the four-step strategic management process are formulating strategy and implementing strategy.

2. When it comes to formulating generic strategies for organizations that operate in one industry or sector:

- FBL management tends to emphasis two main generic strategies: cost leader (minimize financial cost) and differentiation (provide unique product or service quality).
- TBL management tends to emphasize the generic strategy of TBL cost leader (increase financial well-being by reducing the financial costs associated with socio-ecological negative externalities) and TBL differentiation (increase financial well-being by providing socio-ecological features consumers are willing to pay for).
- SET management emphasizes the generic strategies of minimizer (minimize total socio-ecological negative externalities), transformer (enhance total socio-ecological positive externalities), and compounder (combination of minimizer and transformer).

3. When it comes to formulating strategies for diversified organizations:

- FBL management tends to emphasize market growth rate and market share, which results in four different SBU types: star, cash cow, question mark, and pet.
- TBL management emphasizes sustainable development, and SET management emphasizes restorativeness, which results in four SBU types: sustainability hero, fragile player, innocent bystander, and lavish actor.

4. When it comes to implementing strategies:

- FBL management emphasizes deliberate strategy, the content school, and sees strategic management as analytical science.
- TBL management balances deliberate and emergent strategy, the content and process school, and sees strategic management as analytical science with some elements of craft.
- SET management emphasizes emergent strategy, the process school, and sees strategic management as a craft.

5. Steps 3 and 4 of the strategic management process help entrepreneurs to improve all phases of their stakeholder analysis, and to select an appropriate generic business strategy.

QUESTIONS FOR REFLECTION AND DISCUSSION

1. Describe the four steps in the strategic management process. Which one of the four steps is the most important? Defend your answer.

2. Do you think that strategic management plays a more central role in the FBL, the TBL, or the SET approach? Which approach to strategic management is most difficult to put into practice? Explain your answer.

3. Develop a new alternative portfolio matrix that has two dimensions that you personally feel are important, but that are different from the dimensions presented in this chapter (i.e., different from Figures 10.1 and 10.3). Try to find examples of organizations in each quadrant.

4. Briefly describe the differences between the content and process school analyses of how Honda motorcycles became #1 in the U.S. market. The process school description, which is based on interviews with the managers involved, may be the more accurate portrayal of what *actually* happened, but do you think the content school description is more valuable for teaching purposes? Put differently, if Honda *had* completed the SWOT analyses and had chosen the correct strategy *prior* to entering the U.S. (as consistent with the content school approach), then it could have saved a lot of time and money and avoided floundering around after it arrived. On the other hand, perhaps doing the rational analysis up front would not have resulted in the successful strategy it eventually developed, and perhaps the real key to Honda's success was that managers engaged in strategic learning during times of floundering. Which approach do you think should be taught in business schools? Defend your answer. Would it be better to teach that one approach, or to teach both?

5. Why was Honda successful? Should Honda's approach be copied? Explain your reasoning.

6. Now that you have read the chapter, use the concepts you have learned to analyze the opening case. Would you classify Warby Parker as an FBL, TBL, or SET organization? Explain the basis for your classification. What is your advice to the firm going forward?

7. In Chapter 9 you prepared vision and mission statements as well as a stakeholder map for the Entrepreneurial Start-up Plan (ESUP) of an organization you might like to create. Reconsider those plans in light of the material from this chapter. What elements (e.g., competitors, suppliers) have a different meaning when you consider them in the context of their industry? Is there a dominant product or service in your intended industry? Where does it fit in the portfolio matrix? What does that mean for your plans?

8. Which generic business strategy will you choose for your organization? Why? What does that choice mean for your plans?

SPACE TO WRITE DOWN YOUR REFLECTIONS & NOTES

PREVIEW AND SUMMARY OF CHAPTER 11

	FBL	TBL	SET
Organizing Ensuring that tasks have been assigned and a structure of relationships created that facilitates meeting organizational goals	Emphasizes: - the *content* of organizing; - *rational* competencies; - the *individual* level of analysis; - stakeholders *inside* the organization	Emphasizes: - the *content* (sometimes *process*) of organizing; - *rational* (sometimes *relational*) competencies; - the *individual* (sometimes *group*) level; - stakeholders *inside* the organization (and sometimes *external*)	Emphasizes: - the *process* of organizing; - *relational* competencies; - the *team/group* level of analysis; - including *external* stakeholders
Fundamental #1 Ensure that work activities are designed to be completed in the best way for the organization	**Standardization**, determining the extent of uniform practices for organizational members to follow in doing their job	**Enlightened Standardization**, which refers to standardization, coupled with experimentation when it is profitable	**Experimentation**, implementing new-and-possibly-better ways of performing tasks on an ongoing trial basis
Fundamental #2 Ensure that the tasks assigned to members are the ones required to fulfill the work of the organization	**Specialization**, selecting sub-sets of standardized organizational tasks and allocating them into separate jobs	**Enlightened Specialization**, which refers to specialization, coupled with sensitization when it is profitable	**Sensitization**, attending to, and improving, how tasks fit with those of co-workers and others
Fundamental #3 Ensure that there is orderly deference among members	**Centralization**, determining the extent to which decision-making authority is atop the hierarchy	**Enlightened Centralization**, which refers to centralization, coupled with dignification when it is profitable	**Dignification**, treating everyone with dignity and respect in community
Fundamental #4 Ensure that members work together harmoniously	**Departmentalization**, determining how members and resources are grouped together to achieve the work of the larger organization	**Enlightened Departmentalization**, which refers to departmentalization, coupled with participation when it is profitable	**Participation,** emphasizing mutual discernment, giving stakeholders a voice in the organization and how jobs are performed
Entrepreneurship Implications	Their uncertain nature tends to make start-ups less developed in terms of an FBL approach, and more likely to adopt a SET approach		

CHAPTER 11: FUNDAMENTALS OF ORGANIZING

Learning goals

After reading this chapter, you should be able to:

1. Identify the four fundamental components of organizing,

2. Describe how FBL, TBL, and SET management differ in their approaches to organizing.

3. Identify the key feature of each of the four fundamentals of organizing, and how each is operationalized in the FBL, TBL, and SET approaches.

4. Explain how entrepreneurial start-ups with few resources tend to manage the four fundamentals of organizing.

ORGANIZING AT SEMCO[1]

When 21-year old Ricardo Semler took over his father's company (Semco) in the early 1980s, it employed about a hundred people and generated $4 million in annual revenue. Semco produced marine pumps for Brazil's shipping industry, and was organized in a traditional manner. It had well-developed operating standards, formal rules, and detailed job descriptions that indicated the training and experience required for each position. It also had a fairly centralized authority structure and a well-developed departmental structure. In short, Semco's structures and systems were developed fully enough for the father to hand over the reins of power to a 21-year old.

Ricardo Semler, however, was not fond of the way things were organized at Semco. He had previously worked for a summer in Semco's purchasing department, and asked himself: "How can I spend the rest of my life doing this? How can I stomach years of babysitting people to make sure they clock in on time? Why is this worth doing?" So, he threw out the books of rules and regulations that had been the result of years of *standardization* and formalization. Even after he helped Semco grow to over 3,000 employees and $200 million in annual revenues, its manual was still a mere 20 pages, complete with cartoons. Semco doesn't even have a written mission statement, preferring instead to foster *experimentation*. Minutes are seldom taken at Semco meetings, because once things get written down they can constrain future experimentation. Semler wants the standards that guide activity at Semco to be fluid and constantly (re)constructed by its members.

Specialization is also downplayed at Semco: there are no job descriptions. Semco even has a "Lost in Space" program that assumes young new hires often don't know what they want to do with their lives. The program allows them to roam through the company for a year, moving to a different unit whenever they want to. Semler himself spends little time at work (he doesn't even have an office), preferring instead to learn and get input from a wide variety of stimuli. He models an approach creates opportunities for everyone to be *sensitized* to needs and opportunities that might otherwise be overlooked.

Semler is also not too keen on the *centralization* of authority. Even though Semco has diversified and grown, it still has only three levels of hierarchy. Semler himself is one of six "Counselors" (top management), who take turns leading the company for six months at a time. Workers in Semco choose their own work hours, set their own salaries, and decide who will be their managers. Managers trust workers and treat them with *dignity*. As Semler notes: "Most of our programs are based on the notion of giving employees control over their own lives. In a word, we hire adults, and then we treat them like adults."[2] The company recently held a party marking ten years since the last time Semler made a decision.

Regarding *departmentalization*, Semco does not have large departments. Semler prefers smaller, more autonomous units of 150 or fewer members, where each person knows that their *participation* matters. The heavy emphasis on participation is consistent with Semler's commitment to democracy, a watchword at Semco. He notes that we send our children around the world to die for democracy, but we lack democracy in our workplaces.

Ricardo Semler's embrace of a SET approach has coincided with an outstanding growth rate of about 20% per year since he took over from his father, and Semco has interests in businesses worth almost US$10 billion.[3] Even so, Semler is very clear that growth and profits are not his primary goals. He says:

"I can honestly say that our growth, profit, and the number of people we employ are secondary concerns. Outsiders clamor to know these things because they want to quantify our business. These are the yardsticks they turn to first. That's one reason we're still privately held. I don't want Semco to be burdened with the ninety-day mindset of most stock market analysts. It would undermine our solidity and force us to dance to the tune we don't really want to hear—a Wall Street waltz that starts each day with an opening bell and ends with the thump of the closing gavel."[4]

"Profit beyond the minimum is not essential for survival. In any event, an organization doesn't really need profit beyond what is vital for working capital and the small growth that is essential for keeping up with the customers and competition. Excess profit only creates another imbalance. To be sure, it enables the owner or CEO to commission a yacht. But then employees will wonder why they should work so the owner can buy a boat."[5]

Semler is enjoying his opportunity to demonstrate that businesses can thrive when you treat people with dignity, foster trust and participation, value experimentation and learning, and are sensitive to the larger needs and opportunities around you. For him, these are the genuine ***fun***damentals of organizing. His approach has attracted admiration among his peers; he has been named business leader of the year several times by a poll of over 50,000 Brazilian executives.

Having completed our discussion of the Planning function of management, we now examine the Organizing function. Once managers have made plans and strategies about which goods and services their organization will offer, they need to organize the resources to put their plans into action. This chapter introduces the general idea of organizing, describes its four fundamental components, and explains the similarities and differences between the Financial Bottom Line (FBL), Triple Bottom Line (TBL), and Social and Ecological Thought (SET) approaches.

The Four Fundamentals of Organizing

As we learned in chapter 1, the management function of **organizing** *means ensuring that tasks have been assigned and a structure of relationships created that facilitate the achievement of organizational goals.* Although humankind has had a long history of organizing, contemporary organizations only came into existence during the last century. We live in a time when ideas like industry analyses, generic strategies, division of labor, and economies of scale are taken for granted, and we no longer marvel at the productivity and wealth that they help to create.

While it may sound simple, the idea of organizing is inherently complex. It's a bit like riding a bike. Even if you know how to ride a bike, it can still be challenging to identify the key principles that describe how to ride a bike, or how riding a bike is even possible. The same is true for organizing. Fortunately for us, Max Weber—one of the most influential thinkers in management and organization theory—showed that the essence of managing the organizing function can be broken down into four fundamental components, as follows. Managers need to ensure that:

1. **Work activities are designed to be completed in the best way to accomplish the overall work of the organization.** This component involves understanding the overall mission and strategy of the organization, and breaking it down into smaller

steps and specific activities that, taken together, can help accomplish the overall work of the organization.[6]

2. **The tasks assigned to members are the ones required to fulfill the overall work of the organization.** This component involves taking all the specific activities that need to be performed, and assigning them to specific organization members to make sure the activities are completed.[7]

3. **There is orderly deference among members.** This component involves ensuring that members know who makes which decisions, who assigns tasks, and who should be listened to in which situation.[8]

4. **Members work together harmoniously.** This component pulls everything together, ensuring that the different pieces of the organizational puzzle are working together as desired.[9]

Over the past century, management scholars and practitioners have been greatly influenced by the FBL approach and its assumptions about the best way to fulfill these four fundamentals of organizing. When we take for granted the assumptions and ideas that FBL management emphasizes about organizational structures, we forget how they influence us, just like we forget that we are influenced by the everyday physical structures that in our everyday lives. For example, the floor plan of your home and your office shapes whom you interact with and how you interact with them (e.g., is the setting formal or informal?). The famous architect Frank Lloyd Wright said that he could design a home that would cause newlyweds to get divorced within a few months. Along the same lines, Winston Churchill observed that "we shape our buildings, and hereafter our buildings shape us."[10] Similarly, we design our organizational structures, and hereafter those structures shape us.

We design our organizational structures, and thereafter those structures shape us.

It is instructive to develop this architectural metaphor further. Architecture theory goes back at least 2,000 years to Roman times when the three fundamentals of architecture were identified as firmness, utility, and beauty.[11] Different schools of thought or approaches to architecture will have different emphases in how they deal with each of these three fundamentals. For example, one approach to architecture might place great emphasis on the financial costs of a building, and seek to keep costs as low as possible. This might result in buildings that are built to last 40 years, are designed to have multipurpose rooms, and create a sense of beauty via minimalism or via inexpensive features like faux marble countertops. A different approach to architecture might emphasize ecological sustainability, which might result in buildings constructed out of locally available natural materials with extra insulation, have rooms designed to connect people to each other and to nature, and whose aesthetic appeal comes from fitting into its natural and socio-cultural environment. Of course, these two approaches to architecture not mutually exclusive, and in the final analysis all architects must take both cost and sustainability into consideration.

The same is true for the different management approaches to the four fundamentals of organizing that we will examine in this chapter. For example, FBL management has a different approach to the four fundamentals than SET management does. But, as with the architects, and as will be developed more fully in the next chapter, these two approaches are not mutually exclusive. SET managers will place a greater *relative emphasis* on a SET approach to the four fundamentals of organizing, while FBL managers will place a greater *relative emphasis* on an FBL approach. But SET managers will also draw to some extent from the FBL approach, and FBL managers will draw to some extent from the SET approach.

FBL management has a different approach to the four fundamentals of organizing than SET management does. But these two approaches are not mutually exclusive.

Just as there are clear differences in how buildings are designed and how they operate (depending on the approach of the architect), so also there are clear differences in how organizational units are designed and how they operate (depending on the approach of their top managers). Research suggests that FBL, TBL, and SET managers address each of the four fundamentals of organizing differently.[12] FBL organizing is based on principles designed to maximize efficiency, productivity, and financial well-being. TBL organizing is based on principles designed to optimize efficiency, productivity, and profits while seeking opportunities to reduce negative socio-ecological externalities. SET organizing is based on principles designed to enhance positive socio-ecological externalities in a way that maintains adequate levels of efficiency, productivity, and profits.

In general, FBL management focuses more on the *content* of organizing, on *rational* competencies, and on breaking things down to an *individual* level of analysis. In contrast, SET management places relatively more emphasis on the *process* of organizing, on *relational* competencies, and on the team and *group* level of analysis. SET management has the most fluid orientation to organizing, whereas FBL management is more static.[13] TBL management lies somewhere between the two, often leaning towards FBL management, but following SET principles in situations where doing so reduces negative socio-ecological externalities while enhancing an organization's financial well-being.

#1: ENSURE WORK ACTIVITIES ARE COMPLETED IN BEST WAY

The first fundamental of organizing involves understanding the overall work of an organization and then breaking it down into smaller tasks or steps. For example, there are many ways for a bicycle maker to build its product. The first fundamental involves identifying the best ways to bend the handlebars, to weld pieces together, to apply paint, and so on, so that in the end a functioning and efficiently-built bike emerges.

Standardization and experimentation

To address the first fundamental of organizing, FBL managers emphasize **standardization**, *which refers to developing uniform practices for organizational members to follow in doing their jobs.* The level of standardization in a firm can vary along a continuum from many clear standards (prescribed) to relatively few standards (non-prescribed). FBL managers focus on specifying the *optimal* level of standardization—such as procedures organizational members must follow when they perform their tasks—as they try to maximize organizational efficiency, productivity, and financial well-being. Although the tendency is to focus on formalized standards (**formalization** *refers to the amount of written documentation in an organization*), informal standards that govern and give meaning to members' behavior are also important (this will be discussed in Chapter 12).[14]

Although managers often focus on formal *standards,* informal *standards are also very important.*

When we say that FBL managers emphasize standardization, it does not mean that "FBL managers favor many prescribed standards" (though in some cases they may). Rather, it means that managers expend a lot of effort trying to find the correct level of standardization. In doing so, FBL managers sometimes develop multiple standards, and at other times only a few. For example, prior to Taylor's time and motion studies (see Chapter 2), workers who shoveled pig iron or coal into train cars would bring their own shovels from home, and every worker might have a different-sized shovel. There were no standards regarding what type of shovel was best for each task. However, after Taylor performed a series of experiments to determine what sized shovels were best for maximizing productivity for each task, the company introduced standards in line with his findings.

SET managers also use standards to addresses the first fundamental of organizing but, instead of emphasizing standardization, SET managers tend to emphasize **experimentation**, *which refers to members' ongoing voluntary implementation of new-and-possibly-better ways of performing tasks on a trial basis.* SET experimentation seeks to improve socio-ecological well-being while maintaining (but not necessarily maximizing) financial well-being. SET experimentation differs from FBL standardization in several important ways. First, FBL standardization has a top-down focus (managers determine the appropriate level of standards), while SET experimentation is bottom-up (members experiment with different ways of performing tasks). Second, the FBL approach has a static nature (e.g., following "tried and true" standards wherever possible), while SET experimentation is more dynamic (experimentation is ongoing, constantly trying new ways of performing tasks). Third, FBL standardization tries to find the "one best way" to do things, while SET experimentation recognizes that the best way to do things is constantly changing both inside and outside the organization. A SET approach to experimentation emphasizes the importance of discussing ideas in a group setting, and benefiting from others' input and refinement.

Lincoln Electric,[15] which started in 1895, has become one of the most successful manufacturing companies in the world thanks to an emphasis on experimentation that helps it achieve significantly lower production costs than its competitors in a highly standardized context. At the heart of its success are two policies built into its organization structure. One policy guarantees employment for its workers even in down times, and the other policy guarantees that the standard rates for piecework will not be changed simply because employee earnings are deemed to be too high. The resulting structure provides workers with plenty of incentive to increase efficiency (piece-rates will not be changed due to their improvements) and no disincentives (jobs will not be lost due to increased efficiency). Average wages at Lincoln Electric are about twice the going rate for similar work in other firms. The merit of this approach is illustrated by an event during World War II, when the U.S. government asked all welding equipment manufacturers to add capacity. At that point, the CEO of Lincoln Electric went to Washington to explain that the nation's existing capacity would be sufficient if it were used as efficiently as it was at Lincoln Electric. He then proceeded to provide proprietary knowledge about standards and techniques that would improve industry-wide productivity. When these were introduced, industry output increased. For a period of time, competitors also reduced their costs to about the same level as those at Lincoln, but soon Lincoln's continuing emphasis on experimentation allowed it to once again outperform its competitors (who continued with their relative emphasis on standardization).

Even experiments that fail still enhance organizational knowledge.

Of course, sometimes SET-based experiments will fail, in which case organizational members may revert back to the previous practices, but even then the organization will have gained new knowledge from the experiment. In other cases an experiment may be a rousing success, and other members of the organization benefit and can adapt the lessons learned. For example, Dan and Wilma Wiens's SET approach to their CSA (see Chapter 4) can be characterized by ongoing experimentation, where the standards being followed are under constant scrutiny and adaptation, and each year brings new experiments. Dan models this learning orientation in his developmental work with other farmers, and is deliberate in encouraging others to adopt a similar emphasis on experimentation.[16]

TBL management's approach to the first fundamental of organizing might be best described as **enlightened standardization**, *which is a variation of FBL standardization that embraces SET experimentation when it profitably reduces negative socio-ecological externalities*. For example, in the business world, McDonald's hamburgers and French fries have long been seen as examples of high FBL standardization. McDonald's has invested a lot of resources into developing highly detailed procedures manuals to ensure that the quality and taste of its food is consistent over time and across locations.[17] Recently, McDonald's has expanded the criteria that it uses to develop standards, and now has new standards that reduce negative externalities by experimenting with ways to reduce packaging and the use of fossil fuel.[18]

Remember that the key difference between the different approaches to management is in terms of their *relative* emphasis. All approaches have some emphasis on both standardization and experimentation. For example, Semco has standards (e.g., do not to take minutes at meetings), but the emphasis is on experimentation. Similarly, medical doctors follow standards, but doctors at a SET-oriented teaching hospital are more likely to follow them with an eye towards improving practices in the next round, compared to doctors in an FBL-oriented hospital that seeks to process as many patients as possible.

All approaches to management have some emphasis on both *standardization* and *experimentation; the key difference is in their* relative emphasis *on each.*

#2: ENSURE APPROPRIATE TASKS ARE ASSIGNED TO MEMBERS

The second fundamental of organizing is to ensure that tasks assigned to members are the ones required to achieve the overall work of the organization. This idea is reflected in the concept of division of labor, as famously illustrated by Adam Smith's pin factory, where productivity was one thousand times greater when workers performed specialized tasks rather than performing all the different tasks that are necessary to make a pin (see Chapter 2).

Specialization and sensitization

FBL management addresses the second fundamental of organizing by placing relative emphasis on **specialization**, *which involves selecting sub-sets of standardized organizational tasks and allocating them to separate jobs.* Job specialization can be narrow (which means the tasks that members perform are fairly limited and focused) or broad (which means that members perform a wide range of tasks). Specialization plays a central role in the remarkable account of how Henry Ford revolutionized productivity in the automobile industry when he pioneered the assembly line; individual members worked on one step of building a car (narrow specialization), rather than trying to assemble an entire car (broad specialization). Typically, the specialized knowledge, skills, abilities, and other characteristics (KSAOs) required to perform each job are spelled out in job descriptions, which also may describe the formal qualifications required for job-holders (see Chapter 13). For example, an accounting firm might require a staff accountant to pass the CPA exam before being promoted. Similarly, universities require that students have specified qualifications in order to enroll in courses, such as having a high-school diploma and having completed any pre-requisites for the course.

SET managers also use specialization to addresses the second fundamental of organizing but, compared to FBL managements, SET managers place greater relative emphasis on **sensitization**, *which refers to members actively being aware of how their work fits with co-workers and others with an eye toward improving practices via experiments that take advantage of opportunities or address needs.* Just as FBL specialization helps to identify which standardized tasks should be performed by whom, so also SET sensitization helps to identify what kinds of experiments should be performed by whom. Rather than focusing on ensuring that organizational members conform to specific job descriptions (specialization), a hallmark of the SET approach is to encourage members to continuously adapt to their context and improve how they do their jobs in harmony with others around them. The focus is on the dynamic process of organizing (being sensitive to new needs and opportunities), rather than on the static outcome of organizing (having the KSAOs to perform tasks listed in a job description). Sensitization includes being sensitive to stakeholders' physical, social, ecological, and spiritual needs.[19]

Sensitization is illustrated by how, rather than assigning a desk to each of its (specialized) office workers, Semco encourages them to move around from one desk to another from one week to the next. Not even Ricardo Semler has his own office. This creates plentiful opportunities to get to know how the various jobs at Semco fit together, and this increased sensitization can in turn inform experimentation. It is interesting that when similar ideas (called "hot desking") are implemented in FBL organizations for cost-saving reasons—rather than in a spirit of SET sensitization and experimentation—they are often not well-received by employees.[20]

To address the second fundamental of organizing, TBL management emphasizes **enlightened specialization**, *which is a variation of FBL specialization that embraces SET sensitization in instances where it profitably reduces negative socio-ecological externalities.* For example, TBL organizations may have "sustainability officers" whose job is to learn about different operations throughout the organization, and who also attend meetings with external sustainability-oriented stakeholders to hear about new ideas that can reduce negative socio-ecological externalities while maintaining or enhancing profits.[21] For example, Frank O'Brien-Bernini, the first chief sustainability office at Owens Corning, describes a two-year effort to develop a major wind farm to provide a renewable source of energy for his firm: "Whenever tensions rose with our finance team, I would remind us all of that 'very special day' when our 'all-business' controller, typically leaning back with her arms and legs crossed, suddenly leaned forward and smiled when she realized this deal actually might generate profits."[22]

Finally, note again that the key difference between the different approaches is in terms of *relative* emphasis. All management approaches pay attention to specialization and to sensitization. FBL management places relative emphasis on ensuring that organizations have specialists with expertise in job design and recruitment, and have upper level managers who monitor opportunities to increase profits. TBL

Again, each management approach has some emphasis on both specialization and on sensitization, but they differ in terms of their relative emphasis.

management is similar, but in addition middle and upper level managers explicitly seek opportunities to increase financial well-being by reducing negative socio-ecological externalities. SET management emphasizes that all members should be sensitive to opportunities to enhance overall performance, and recognize that there is need for appropriate specialization to achieve this end.

#3: ENSURE ORDERLY DEFERENCE AMONG MEMBERS

The third fundamental component of organizing draws attention to the need for members of an organization to respect and submit to one another in an orderly way. This deals with questions such as who should be listened to, how decisions are made, and how people treat one another. All three approaches to management use centralization to addresses the third fundamental of organizing but, compared to FBL and TBL management, SET managers place greater relative emphasis on the idea of dignification.

Centralization

From an FBL perspective, ideas related to authority—and the degree of its centralization—are key to ensuring orderly deference among organizational members. **Centralization** *refers to the extent to which decision-making authority resides atop the organization's hierarchy.* **Authority** *refers to the formal power given to specific members (usually managers) to arrange resources and/or to assign tasks and direct the activities of other members in ways that help to achieve organizational goals.* Organizational members are expected to defer to the people who have authority over them. Managers can use their authority to reward behavior that is consistent with organizational goals and plans, and to punish behavior that is inconsistent.

An organization's centralization ranges from being concentrated to being diffused. It is concentrated when authority rests with top managers, and it is diffused (or decentralized) when authority is dispersed throughout an organization. An organization's overall centralization may be very concentrated (e.g., authority for most decisions is retained in the CEOs office), while any particular sub-unit within that organization may be relatively diffused (e.g., what little decision-making authority that resides in, say, the Finance department is dispersed widely throughout that department).[23] Organizations with diffused authority have a "flat" structure where managers have a wide **span of control**, *which refers to the number of members that report directly to a given manager.* As described later in this chapter, AES had 40,000 employees but only three levels of hierarchy.

There are two sub-types of authority. **Line authority** *refers to having formal power to direct and control immediate subordinates,* while **staff authority** *refers to having formal power to advise and provide technical support for others, but not to tell them what to do*. For example, human resource managers have staff authority to provide expert advice to managers of other departments, but they also have line authority over other members in their own department. Staff managers provide advice, and line managers make decisions.

The authority that managers have, and which they can subsequently delegate to others, was initially delegated to them by organizational members and by members of society. **Delegation** *refers to the process of giving authority to a person or group to make decisions in a specified sphere of activity.* In a democracy, authority is granted to managers via citizens who elect government officials who, in turn, establish the rules by which organizations are governed by their owners who, in turn, delegate authority to managers to act on behalf of the owners. By signing a contract to accept a job in an organization, a new member agrees to accept that managers have authority to assign tasks to perform in exchange for payment. A similar thing happens when someone joins a voluntary organization; they agree to abide by the rules and authority structures of the organization.

The authority that managers have was initially delegated to them by organizational members and by society.

When members accept authority to make decisions in a certain domain of organizational operations, they also accept responsibility for the decisions that they make (or fail to make), and they accept accountability for their actions. **Responsibility** *refers to the obligation or duty of members to perform assigned tasks.* Problems arise when someone is given responsibility without being given the required authority to meet that responsibility. Suppose a new marketing manager has the responsibility to increase sales by 10%. That manager will be very frustrated if she is not also given the authority to do the things that are necessary to reach the goal (e.g., to hire competent salespeople and remove incompetent salespeople). **Accountability** *refers to the expectation that a member is able to provide compelling reasons for the decisions that they make.* If a member is unable to provide a good explanation for a decision gone awry, he may be given professional training and development, have authority taken away from him, or be removed from his position.

Dignification

SET managers also use centralization to addresses the third fundamental of organizing but, compared to FBL management, SET managers place greater relative emphasis on the idea of **dignification,** *which refers to treating everyone with dignity and respect in community.* Dignification draws attention to everyone in an organizational community having a voice that deserves to be listened to, in contrast to FBL centralization, which places greater relative emphasis on listening to members in positions of authority. Whereas FBL authority-based relationships tend to be somewhat static, and linear (e.g., a manager has authority over her subordinate), SET dignity-based relationships tend to be dynamic and holistic (e.g., members have a sense of overall community well-being rather than a narrower sense of simply trying to maximize an organization's financial well-being). As

Martin Buber put it, rather than set up authority structures that treat others as faceless "its" in the name of utilitarian outcomes, dignification seeks to treat others as "thous" who are listened to and respected in their own right (not merely because they have authority or power).[24]

As one SET CEO said about having employees make decisions: "… sometimes it's been shown that their way is better than mine would've been. And even when it isn't, just allowing them the freedom to do that [make decisions], I think, is worthwhile."[25] People who participate in setting their work standards are more productive and satisfied than when the exact same standard is imposed on them by a manager.[26] For SET managers, creating ways of organizing that distribute dignity throughout the organization is better than trying to develop and fine-tune authority structures.

Unlike authority, which is usually seen as a limited resource that must be parceled out sparingly, dignity is an unlimited resource that can be distributed generously; everyone has inherent worth that should be recognized.[27] Consider the dignity that was evident when Ricardo Semler gave Semco employees the authority to set their own salaries. According to Semler:

> "Arguably, Semco's most controversial initiative is to let employees set their own salaries. Pundits are quick to bring up their dim view of human nature, on the assumption that people will obviously set their salaries much higher than feasible. It's the same argument we hear about people setting their own work schedules in a seven-day weekend mode. The first thing that leaps to mind is that people will come as late or little as possible—this has never been our experience."[28]

Treating people with dignity also means providing them with the information they require to use their decision-making authority responsibly. Semler describes five pieces of information that help employees determine how to set an appropriate salary for themselves. Managers provide employees with: 1) market surveys about what people earn who do similar work at competing organizations; 2) what everyone else in the company earns (all the way from Semler to the janitors); and 3) open discussion of the company's profits and future prospects in order to provide a sense of whether the current market conditions allow above or below average salaries. The remaining two items are things that employees know but managers do not: 4) how much employees would like to be earning at this point in their career, keeping in mind how happy they are with their job and work-life balance; and 5) how much their spouses, neighbors, former schoolmates, and other significant "comparison others" are earning. Very seldom has this system been abused, perhaps because employees know that if they request too large a salary they run the

Unlike authority, which is usually seen as a limited resource that must be parceled out sparingly, dignity is an unlimited resource that can be distributed generously; everyone has inherent worth that should be recognized.

risk of annoying their colleagues and suffering the stress that comes from making a decision that they themselves know to be unjust and undignified.

Finally, to meet the third fundamental of organizing, TBL management emphasizes **enlightened centralization**, *which is a variation of FBL centralization that embraces SET dignification on a piecemeal basis when it profitably reduces negative socio-ecological externalities*. Consider an example that occurred when co-founder Dennis Bakke was CEO at AES, a global energy giant with 40,000 employees in 31 countries and annual revenues of more than $8 billion (see Chapter 16).[29] Because Bakke was committed to a SET approach, AES avoided written job descriptions, official organization charts, and tall hierarchies (three layers were enough). Bakke also refused to place primary emphasis on quantifiable financial goals. Instead, he argued that what he called "joy at work" can be found when the SET fundamentals of organizing are evident. For example, *sensitization* was facilitated at AES because performance was explicitly evaluated based on AES principles that took externalities into account and transcended economic goals. *Dignification* was evident because Bakke saw himself as serving his employees, rather than as using his authority to command people and resources. The default at AES was to make decisions in community by members at the lowest practicable organizational level, not at the level that was deemed most efficient based on an authority structure. AES members and external stakeholders were invited to participate in AES's decision-making process, annual reports acknowledged the contributions of ordinary employees, and people were not fired for making mistakes.

TBL organizations are often admired when they adopt SET practices (even on a piecemeal basis). But when they face the crises and economic downturns that are inevitable for any organization, TBL firms often succumb to pressure to revert to 'tried-and-true' conventional FBL methods.

Unfortunately, at one point AES employees had falsified the results of water testing at an AES plant in Oklahoma. Even though no ecological damage resulted from this deception, the price of AES stock dropped 40% on the day it released a letter that both acknowledged the falsification and recommitted itself to being an organization based on integrity. Soon Bakke's job was on the line:

> "Several of our most senior people and board members raised the possibility that our [SET-based] approach to operations was a major part of the problem. It was as if the entire company were on the verge of ruin. They jumped to the conclusion that our radical decentralization, lack of organizational layers, and unorthodox operating style had caused 'economic' collapse. There was, of course, no *real* economic collapse. Only the stock price declined. …
>
> All of this put an enormous strain on the relationship between Roger [Sant, AES co-founder] and me. The board had lost confidence in me and my leadership approach.

(I believe Roger had, too.) Should we split the company? Should one of us quit? He wasn't having fun, and neither was I. I told him I wanted to stay and make the company work. …

The breach by our Oklahoma group was minor relative to similar missteps by dozens of large, conventionally managed organizations. There was nothing to suggest that the company operating in a more conventional [FBL] manner would have protected AES from such mistakes."[30]

What do you think Bakke did? Although he and AES had been admired for emphasizing SET organizational principles, when facing the crises and economic downturns that are inevitable for *any* organization, he faced enormous pressure to revert to "tried-and-true" conventional FBL methods. If Bakke had been a TBL manager, he would have given in to such pressures from his board. However, as a SET manager Bakke remained committed to SET fundamentals of organizing, and AES's performance improved again. Bakke believes that there was nothing inherent in his approach that would make AES more vulnerable to missteps than if the company followed a conventional FBL approach. In fact, a SET approach might decrease likelihood of such problems.[31]

#4: ENSURE MEMBERS WORK TOGETHER HARMONIOUSLY

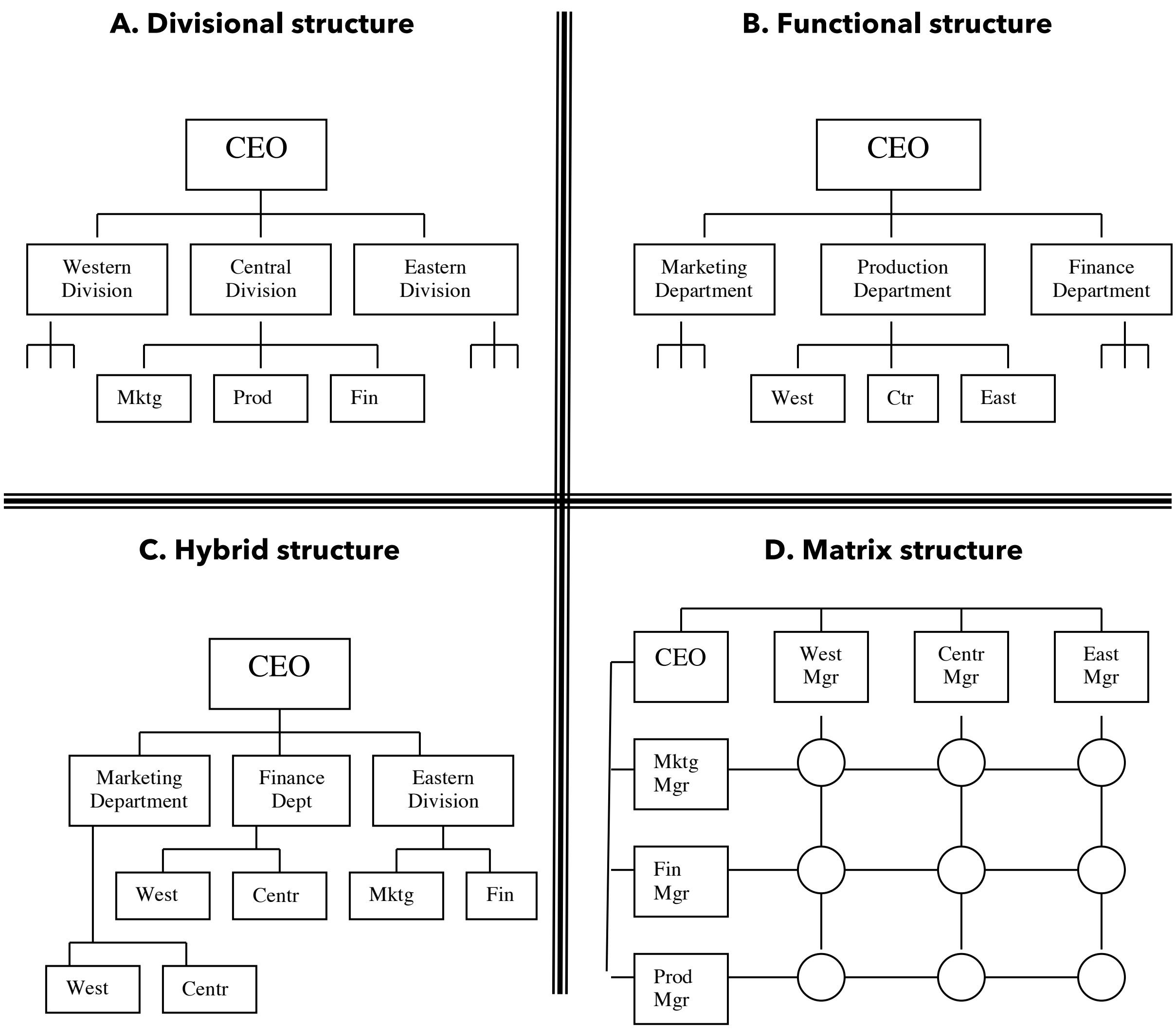
The fourth fundamental of organizing focuses on how members work together. The idea is to ensure that all the tasks performed by organizational members fit together and contribute to a larger whole. As organizations grow in size, this will mean deciding where and with whom each member performs their respective tasks. All three approaches to management use departmentalization to addresses the fourth fundamental of organizing but, compared to FBL and TBL management, SET managers place greater relative emphasis on the idea of participation.

Departmentalization

Departmentalization *refers to how members and resources are grouped together to achieve the work of the larger organization*. Departmentalization has two key dimensions. The first is *departmental focus*, which looks at the relative emphasis an organization places on internal efficiency versus on external adaptiveness. The second is *departmental membership*, which looks at whether departmental membership is permanent versus short-term. Departmental focus is concerned with the content of what each department is assigned to do, whereas departmental membership looks at whether members are permanent and whether they come from within the organization's boundaries. We will look at each in turn.

Departmental focus. The departmental focus dimension describes the basis upon which an organization is divided into smaller, more-manageable sub-groups. Four basic departmental structures that are commonly found in organizations are: divisional, functional, hybrid, and matrix. A **divisional structure** *is evident when members are placed together based on them working as a subunit that provides a specific kind of product or service, serves similar customers, or operates in the same geographic region.* Figure 11.1 (Part A) shows a *geographically*-based divisional structure with a Western Division, a Central Division, and an Eastern Division. An example of a *product*-based divisional structure for a computer manufacturer is one with a Desktop Division, a Laptop Division, and a Handheld Division. A *customer*-based divisional structure for a computer manufacturer might have a Consumer Division, a Business Division, and an Educational Institutional Division.[32] The key point is that each of these divisions are autonomous, that is, they operate like separate businesses or like a strategic business unit. To be successful as essentially separate businesses, they need to organize at a lower level within their hierarchy around key functions like marketing, production, and finance. Each of the divisions will have these departments.

Figure 11.1: Four basic types of departmental structures



A **functional structure** *places members in the same department based on their having similar technical skills and using similar resources to perform their tasks.* For example, as illustrated in Figure 11.1 (Part B), a furniture manufacturing firm might have marketing, production, and finance functions at the top level of the organization. Other bases of departmentalization may also be used at lower levels in the hierarchy; for example, in Figure 11.1 (Part B), the organization is structured around geographically-based departments at the second level in the organization hierarchy. At the lowest level of the hierarchy there will also be various departments within each regional factory where each type of product is manufactured (e.g., chair, tables, and shelving units). In a functional structure, the top management team must coordinate the work of the various functions because none of the functional departments can, on their own, do all the things that are necessary to achieve overall corporate objectives.

The relative strengths and weaknesses of the divisional and functional structures are mirror images of each other. An automobile manufacturer that has a functional structure at the top level of the hierarchy and has just one large production department will be more efficient than a competitor with 10 divisions, each with its own production department. The former company will achieve large economies of scale, that is, the per unit financial cost to produce 10,000 cars on one assembly line is far less than the per unit cost to produce 1,000 cars on each of ten separate assembly lines. The functional approach also offers opportunities for in-depth skill development in each specialization. For example, one Legal Department with ten lawyers may have specialists in commercial, labor, patent, and international trade law, whereas having one lawyer in each of ten different divisions means that the lawyers will need to be more generalists. A functional structure also permits increased spans of control and lower management costs, because it is easier to manage people with similar training and backgrounds (e.g., ten lawyers in one department) than for a divisional manager to manage people from a variety of functional areas.

The relative strengths and weaknesses of the divisional and functional structures are mirror images of each other.

A divisional approach offers different strengths relative to the functional approach. First, in a divisional approach, decision-making authority is closer to the organization's customers. For example, rather than having a single production department produce all the goods for an organization, having a different production department in each region or for each customer group reduces the distance between consumers and producers. This helps managers adapt to changing consumer preferences, and to accommodate for differences across regions or customer groups. Second, the reason for profits may be somewhat unclear in a functional structure (e.g., should credit be given to the Vice-President of the Research & Development Department, the Production Department, or the Marketing Department). But in a divisional approach each of the ten divisions is accountable to make a profit for that division, thus making it easier to recognize the financial performance of top managers in specific divisions. Third, compared to managing a functional department, division managers who coordinate the work of members from a variety different functional areas are likely to develop more well-rounded management skills (which may be an advantage for managers seeking to get promoted to the CEO level).

Divisional and functional structures influence how members see their organization, much like lenses shape our vision. Some lenses are designed to help us to see in the distance, while other lenses help us to see close-up. So it is with different approaches to departmentalization. Functional departments help us to see close-up. They help to maximize efficiency, and to develop fine-tuned skills and expertise in specific functional areas. Divisional departments are better at seeing far away, beyond the borders of the organization, more connected and attuned to the most relevant customers, and thus better able to see shifts in customer preferences, in emerging technologies, in changing government legislation, and so on. However, they are not as good at paying attention to and optimizing internal efficiencies due to, for example, reduced economies of scale. In some divisional structures, two different divisions can be working on the same problem and not even be aware of it.

Hybrid organizations are like bifocals. A **hybrid structure** *seeks to get the advantages of the functional structure (by achieving internal efficiencies and developing internal expertise in some areas) and the advantages of the divisional structure (by being able to adapt to changes in a dynamic external environment).* Hybrid organizations have both functional and divisions simultaneously. Figure 11.1 (Part C) provides an example of a hybrid organization that has a Marketing Department, a Finance Department, and an Eastern Division. In this firm, perhaps because the Eastern Division represents the majority of an organization's activity, it has its own marketing and finance departments. In Figure 11.1 (Part C), both the Marketing and Finance functions are structured around geographically-based departments at the second level in the organization hierarchy.

Matrix departmentalization *occurs when an organization has both divisional and functional departments, and members are simultaneously assigned to both.* Rather than bifocals, the matrix structure is more like having a lens for seeing close with one eye, and a lens for seeing far with the other eye. Just as such eyeglasses would take some getting used to, and would probably cause some head-aches as users try to close one eye or the other as needed, so also matrix structures can be quite challenging to manage and work in. This is because, as we can see in Figure 11.1 (Part D), a matrix structure breaks the unity of command rule. In a matrix structure, members (represented by the circles in Figure 11.1) are responsible to two managers. Thus, matrix structures demand more time be spent

A matrix structure is not unlike the situation facing college students who are simultaneously enrolled in different courses with different professors, and must deal with the stress that comes when each instructor happens to schedule an exam or quiz on the same day.

in meetings to ensure that the amount of work being assigned to members is reasonable. A matrix structure is not unlike the situation where university students are simultaneously enrolled in different courses with different professors. It can be stressful if each instructor were to coincidentally schedule an exam or report due on the same day.

One of the most famous examples of a matrix organization is ABB, which was created by the merger of the Swedish firm Asea and the Swiss firm Brown Boveri. The challenge was to create a streamlined entrepreneurial organization with as few hierarchical layers as possible, starting with what was essentially a group of 1,300 companies with over 200,000 employees in 150 countries. To do this, ABB was divided into 35 business areas, into over 100 country organizations, and into 5,000 profit centers (i.e., managers of each of these 5,000 divisions or strategic business units were expected to show a profit). The manager of a profit center would report to both a country manager as well as to business area managers.[33]

Departmental membership. Membership, the second dimension of departmentalization, has become increasingly relevant in the past couple of decades. Indeed, even the meaning of what it means to be a "member" of an organization has changed. Does it include part-time workers, temporary workers, people working on commission, consultants, or people hired on a one-time basis to perform a task (e.g., to copy-edit a document?). Until recently, it was simply assumed that an organization's departments were comprised of organizational members who had fairly permanent and well-defined individual jobs in a firm. There are still many organizations that have permanent membership, but this is changing.

Until recently, it was simply assumed that an organization's departments were comprised of organizational members who had fairly permanent and well-defined individual jobs in a firm.

Sometimes organizational members worked together in **teams**, *which refers to collections of people who work interdependently as a unit to achieve goals, and are accountable to one another to achieve those goals*. Recently there has been greater emphasis on having members work in **task forces**, *which are teams that disband when their work has been completed, with members "floating" from one task force to the next as the need arises*. This increased fluidity has allowed organizations to be more flexible and adaptable. For example, software programming is often done on a project basis, with specific programmers and other staff assigned to a specific project as needed. When that project is completed (i.e., the software is shipped), the programmers move to various other projects, rather than all staying together and moving to a work on a different project.

There are also increasing opportunities for managers to take what were once permanent jobs or departments within an organization and outsource them. **Outsourcing** *refers to using contracts to transfer some of an organization's recurring internal activities and decision-making rights to outsiders.* For example, a new start-up organization may not have the money to hire its own accountant or graphics designer; it therefore outsources these tasks to other organizations that manage the organization's payroll and its homepage. These outsourced workers are doing the work that used to be performed by members. Along the same lines, a **network structure** *is evident when an organization enters fairly stable and complex relationships with a variety of other organizations that provide essential services including manufacturing and distribution.* Nike is famous for its network structure and use of outsourcing to become the world's largest athletic footwear and apparel company, with more than 1 million workers but less than 30,000 employees. The core staff in its network structure resides in its Beaverton, Oregon, headquarters and designs the prototypes. However, the actual production, transportation and retail sale of its shoes and apparel is outsourced to overseas factories and retailers.[34]

In a **virtual organization,** *work is done by people who come and go on an as-needed basis and who are networked together with an information technology architecture that enables them to synchronize their activities.* Virtual organizations allow for people to be hired for short (or long) periods of time, often on a contract basis, from anywhere around the world. These workers may never see each other, and they may have no ongoing commitment to the organization. They are hired to do a specific job, and when that job is completed their connection to the organization may be over. Some of the organizations in the so-called sharing economy—such as Uber and AirBnB—have characteristics associated with virtual organizations.

Some organizations in the sharing economy, like Uber and AirBnB, have characteristics associated with virtual organizations.

Participation

SET managers also use departmentalization to address the fourth fundamental of organizing. However, compared to FBL and TBL managers, SET managers place greater relative emphasis on the idea of **participation,** *which refers to mutual discernment and giving stakeholders a voice in how the organization is managed and how jobs are performed.* SET participative structures can include permanent members and external stakeholders such as suppliers and customers, and they can span issues related to internal efficiency and external effectiveness, as needed. Participative structures value stakeholders' inputs on decisions, and also their input for setting the agenda as to what issues require decisions. Compared to the SET approach, the FBL and TBL approaches place relatively less emphasis on participation, both in amount and in breadth of involvement. SET management uses participative structures to complement the two generic dimensions of departmentalization.

Departmental focus. All things being equal, SET management generally prefers a divisional structure rather than a functional structure. In addition, the SET approach prefers relatively small divisions (less than 150 members) that essentially operate as autonomous sub-units, where each member has a sense of the overall goals of the unit and understands how their individual effort meshes with the efforts of others to meet those goals. As illustrated at Semco, the ideal size for a division is about 120 to 150 members. Once a division grows much beyond this size, it should sub-divided into two divisions.[35]

Departmental membership. SET managers are more likely to include and invite the participation of external stakeholders. Of course, these stakeholders are not members in a formal sense, but rather as members of the larger community that an organization sees itself operating within. Stakeholders can also include the natural environment more generally. Inviting, listening to, and responding to a variety of stakeholders allows the organization to be sensitized to new opportunities, and also enhances goodwill when the inevitable mistakes are made. For example, Ricardo Semler describes meeting with customers, showing them Semco's financial statements with respect to a particular sale, and listening to what the customers say. Such transparency can in turn prompt reciprocated transparency and openness, and Semler describes how Semco has started whole new product lines simply by listening to their customers. This has been called "extreme stakeholder alignment," which involves deliberately giving opportunities to employees, partners, customers, government representatives, and society to actively participate in making organizational decisions that could affect them: "Alignment is your value creation engine."[36]

SET management often avoids traditional pyramid-shaped organizational charts such as depicted in Figure 11.1. Specifically, the SET approach is uncomfortable with symbolizing managers at the top and subordinates underneath. SET organizations sometimes invert the organizational chart, placing customers and other stakeholders at the top, and managers closer to the bottom. Other times circles are used to draw SET organization charts. For example, Semco can be depicted as three having concentric circles, with the top managers in the innermost circle, middle managers in the next circle, and the remainder of the organization in the outer circle.[37] In other SET organizations, the top management team in the innermost circle might be depicted as overlapping with a series of surrounding intersecting circles containing various organization sub-units and other stakeholders, like petals of a flower.[38]

In some SET organizations, the top management team is depicted as a central circle that overlaps with a series of intersecting circles that represent the organization's various sub-units, like the petals of a flower.

ENTREPRENEURSHIP IMPLICATIONS

One of the most challenging things about starting a new organization is to develop its structure. Some entrepreneurs address this challenge by purchasing a franchise (e.g., McDonald's, Freshii, ReStore), where part of what is being purchased is a prescribed structure that addresses the four fundamentals of organizing. Entrepreneurs may actually be required as a condition of their franchise to closely follow certain policies and structures.

In this section we describe some of the short-cuts entrepreneurs use to manage the four fundamentals of organizing when they start a new organization from scratch. Because entrepreneurs are being pulled is so many different directions, the time and resources that they can invest to establish a structure are limited. This results in under-developed structures that share remarkable similarities across organizations, regardless of whether the entrepreneur has an FBL, TBL or SET approach. An instructive exception is Warby Parker (Chapter 10), whose founders spent two years fine-tuning their structure before launch, and even with that they were not fully prepared.

FUNDAMENTAL #1: STANDARDIZATION & EXPERIMENTATION

Start-ups generally have few standards because new organizations are still figuring out and fine-tuning their goals and strategies, and because entrepreneurs generally do not have time to write policy manuals and job descriptions when they're already working 50 or more hours each week. Instead of developing specific standards for each member of the start-up, entrepreneurs often simply use the organization's overarching goals and strategies to: (a) serve as general guidelines for members' decision-making, (b) facilitate coordinated decision-making, and (c) motivate members by giving them an understanding and appreciation for the meaning of their work. Ensuring that members are aware of the "big picture" also helps to address one of the dangers of having too few performance standards, namely where members spend too little time actually working and too much time trying to find out what they are supposed to be doing.

Start-ups must, of necessity, spend time on experimentation as members learn what works and what doesn't, and as performance standards are continually (re)constructed by members and stakeholders. Experimentation helps the start-up learn more quickly than if all the learning was done only by the founding entrepreneur(s). But start-ups can have too much experimentation; this occurs when members are doing too many experiments and the results of those experiments are not coordinated. Having a weekly meeting where everyone updates each other on their activities is a simple way to guide and focus experimentation, and to ensure that activities are being completed in the best way for the organization.

Start-ups spend time on experimentation as members learn what does and what doesn't work.

FUNDAMENTAL #2: SPECIALIZATION & SENSITIZATION

It is generally appropriate for start-ups to have broad rather than narrow specialization. This is because new organizations are continuously fine-tuning their understanding of the specific KSAOs that they need, and because they have relatively few members to perform all the different tasks that need to be performed (e.g., one member may be both a receptionist and bookkeeper). Thus, entrepreneurs are more interested in hiring generalists (people who know something about a variety of things) rather than specialists (who know a lot about one thing).

Entrepreneurs are typically more interested in hiring generalists (people who know something about a variety of things) rather than specialists (who know a lot about one thing).

Start-ups typically place relatively high emphasis on sensitization, which is evident when people are hired for being able to develop and learn from interrelationships among stakeholders, both inside and outside of the organization. Entrepreneurs value the complementary skills of a team more than the individual skillsets of particular members. SET entrepreneurs in particular appreciate members who have valuable experience or knowledge that goes beyond the financial goals of the organization. An emphasis on sensitization assumes that an organization will have multiple goals that should change as its members grow and learn from each other and from other stakeholders.[39] But start-ups can have too much sensitization, which can result in an inability to help anyone as members become too distracted by trying to help everyone. Again, this danger can be managed via weekly meetings where all members of the start-up report about their work, and help each other stay focused on their key tasks.

FUNDAMENTAL #3: CENTRALIZATION & DIGNIFICATION

Entrepreneurs often have very strong ideas about what should be happening in their start-up, and they are reluctant to delegate authority to others (i.e., they tend to micromanage everything, often in a very autocratic way). However, they soon learn the merit in focusing their efforts on those tasks that are the most crucial for the success of the start-up, and delegating authority to others to complete less essential tasks.

At the same time, entrepreneurs quickly learn that their organization will benefit if the ideas of different members are given serious consideration, and where members treat each other with care and respect, which is facilitated via a free flow of information and collaboration. The danger of too little dignification is that stakeholders will treat their jobs in instrumental terms and thus be reluctant to put in the extra effort often required for start-ups to succeed. However, too much dignification may result in delays as different stakeholders are consulted. Again, weekly meetings where everyone has a voice are a simple way to facilitate orderly deference among members.

FUNDAMENTAL #4: DEPARTMENTALIZATION & PARTICIPATION

Start-ups are more akin to a division than to a functional department, and place relatively high emphasis on participation. Because of their small size, it is possible and often desirable to treat members of a start-up as a team that is seeking to establish itself in its industry. In assembling this team, it is crucial for entrepreneurs to identify the key functional competencies that must be housed in the organization, and those that can be outsourced. For example, in a car dealership, sales skills are a core competency, while tax accounting skills may not be. For a tax filing company, however, accounting skills are central, while sales skills may be secondary. Can payroll be outsourced? Should transactions be handled directly, via a service like PayPal or Shopify? These, and other related decisions, are important ones for entrepreneurs to make. Sometimes the identification of core competences may not be obvious for an entrepreneurial start-up. For example, recall that even the world's largest sports apparel company, Nike, outsources its manufacturing, shipping, and retail functions.

Start-ups tend to place relatively high emphasis on participation, which can help to compensate for the lack of well-developed departmentalization, and facilitate everyone working together harmoniously. This includes giving members a voice, such as in weekly organizational staff meetings, and also giving other outside stakeholders a voice. As illustrated by *31 bits*, start-ups can learn a lot from listening to suppliers and customers, which can help the start-up find its place and prosper in its industry,

Weekly meetings where everyone has a voice are a simple way to facilitate all four fundamentals of organizing.

In sum, regardless whether entrepreneurs prefer an FBL, TBL or SET approach, start-ups will tend to be characterized by relatively: 1) few standards and many experiments, 2) broad skill sets and much attending to how one's work fits with others, 3) diffusion of authority and dignification, and 4) a divisional orientation and participation. These similarities will be discussed further in the next chapter, which will also provide a more-developed discussion about the differences between FBL, TBL and SET organization structures.

CHAPTER SUMMARY

1. Organizing means ensuring that tasks have been assigned and a structure of relationships created that facilitates the achievement of organizational goals.

2. In general, FBL management focuses more on the *content* of organizing, *rational* competencies, and breaking things down to the *individual* level of analysis. In contrast, the SET approach places relatively more emphasis on the *process* of organizing, *relational* competencies, and the *team* and group level of analysis. TBL management is a hybrid between FBL and SET approaches.

3. The four fundamental components ensure that: 1) work activities are designed to be completed in the best way to accomplish the overall work of the organization; 2) the tasks performed by members contribute to the whole; 3) there is orderly deference among members; and 4) members work together harmoniously.

4. To satisfy the first fundamental, FBL management emphasizes standardization (developing uniform practices for organizational members to follow in doing their jobs), whereas SET management emphasizes experimentation (an on-going voluntary implementation of new ways of performing tasks on a trial basis). The TBL approach can be characterized as enlightened standardization, which refers to standardization coupled with some experimentation if doing so enhances the organization's financial well-being.

5. To satisfy the second fundamental, FBL management emphasizes specialization (grouping standardized organizational tasks into separate jobs), while SET management emphasizes sensitization (being aware of, and receptive to, better ways of doing things to take advantage of existing opportunities or to address existing needs). The TBL approach can be characterized as enlightened specialization, which refers to specialization coupled with some sensitization if doing so enhances the organization's financial well-being.

6. To satisfy the third fundamental, FBL management emphasizes centralization (having decision-making authority rest with managers at the top of an organization's hierarchy), whereas SET management emphasizes dignification (treating everyone with dignity and respect in community). The TBL approach can be characterized as enlightened centralization, which refers to centralization coupled with some dignification in instances where doing so enhances the organization's financial well-being.

7. To satisfy the fourth fundamental, FBL management emphasizes departmentalization (grouping members and resources together to achieve the work of the larger organization), whereas SET management emphasizes participation (mutual discernment and guidance). The TBL approach can be characterized as enlightened departmentalization, which refers to departmentalization coupled with some participation in cases where the latter enhances the organization's financial well-being.

8. Generally speaking, classic entrepreneurial start-ups place relatively low emphasis on standardization, specialization, centralization and departmentalization. Instead, they place relatively high emphasis on experimentation, sensitization, dignification, and participation.

QUESTIONS FOR REFLECTION AND DISCUSSION

1. Describe the four fundamental components of organizing. What are the general differences between the three management approaches (FBL, TBL, and SET) in terms of how the organizing function is carried out?

2. Do you think virtual organizations will become more prevalent during your career? Why, or why not?

3. If you treat others with dignity, will that change (increase or decrease) the amount of power that you have? Is the effect of treating others with dignity the same for all people, regardless of how much power they have to start with? Explain.

4. Review the Semco case at the start of the chapter. Should employees be trusted to set their own salaries, choose their own hours, and hire their own managers? Should university students be trusted to assign their own grades? In your view, what sort of information should instructors provide, and what should students provide, to set up a fair way for students to self-assign marks?

5. Ricardo Semler writes: "I'm not preaching anti-materialism. We do, however, desperately need a better understanding of the purpose of work, and to organize the workplace and the workweek accordingly. Without it, the purpose of work degenerates to empty materialism on one side and knee-jerk profiteering on the other."[40] Do you agree with Semler's observations? Explain what you understand to be the purpose of work. How might you as a manager best structure the workplace based on your understanding? How does you analysis relate to Figure 5.1?

6. Think of an organization you might want to start. Describe how you would manage each of the four fundamentals of organization, describing your approach to 1) standardization and experimentation; 2) specialization and sensitization; 3) centralization and dignification, and 4) departmentalization and participation. Why do you think your choices are the best ones? What effect will they have on the organization?

7. Imagine that you just started the organization as described in your answer to question #6. What sorts of changes in how you manage the four fundamentals of organizing would you expect to see after 5 years of operations? What factors would affect the changes? Explain your answer.

PREVIEW AND SUMMARY OF CHAPTER 12

Four generic types of organization design	FBL	TBL	SET
1. Simple type Structure: familial Culture: clan Environment: harsh Technology: craft Strategy: focus	FBL Simple e.g., Amway	TBL Simple e.g., Botanical Paperworks	SET Simple e.g., Greyston Bakery
2. Prospector type Structure: pioneer Culture: adhocracy Environment: prolific Technology: non-routine Strategy: differentiation/ transformer	FBL Prospector e.g., Apple	TBL Prospector e.g., Tesla	SET Prospector e.g., Grameen Bank
3. Defender type Structure: programmed Culture: hierarchy Environment: barren Technology: routine Strategy: cost leadership/ minimizer	FBL Defender e.g., garment factories in Bangladesh	TBL Defender e.g., Everlane	SET Defender e.g., *31 bits*
4. Analyzer type Structure: outreach Culture: market Environment: oasis Technology: engineering Strategy: dual/compounder	FBL Analyzer e.g., Goldman Sachs	TBL Analyzer e.g., 3M	SET Analyzer e.g., Habitat for Humanity
Entrepreneurship implications	Start-ups are most likely to be aligned with a simple or a prospector organization design type.		

CHAPTER 12:
ORGANIZATION DESIGN

Learning goals

1. Identify the five basic elements that constitute organization design.

2. Identify the two underlying dimensions in each of the five basic design elements.

3. Describe each of the four generic organization design types that the five basic elements give rise to.

4. Describe the FBL, TBL, and SET variations of each of the four generic organization design types.

5. Explain how the five elements of organization design influence and constrain the choices of entrepreneurs.

Design for a Soup Kitchen[1]

Nancy Elder has a challenge, and she is looking for someone with knowledge about organization design to help her. Maybe someone like you. If you met Elder she might tell you her story.

"After high-school, I decided that I would try to make this world a better place. I didn't want to go to college just for the sake of enhancing my own career; I wanted some hands-on experience in helping people. Before long, I was doing volunteer work in a local soup kitchen."

You might be surprised to hear how many people in your community depend on food banks and soup kitchens. The food bank in Nancy's city is one of its fastest growing corporations, providing food for over 5% of the population. There are about 20 soup kitchens in the city, each feeding about 250 people a day.

You learn from Nancy that there are three generic types of soup kitchens. She calls the first type "Carrot and Stick" soup kitchens where, in order to get the food, people need to pass through a church. The building is designed so that the only way to the soup kitchen is to go through the chapel. Clients only get their reward (carrot) after hearing a sermon (stick).

She calls the second type the "Self-serving" model (no, this is not a buffet style food kitchen). Self-serving soup kitchens are the ones you read about in the newspapers occasionally, who have a large staff and are able to raise hundreds of thousands of dollars, but only 2% of the money raised actually goes to purchase food for hungry people. At worst, staff in such soup kitchens work there for *their* own self-serving reasons; feeding hungry people provides a means for the staff to raise funds for their own livelihood.

The third type she describes is the "Charity" model. Nancy has worked for a soup kitchen of this type for five years. In this model, well-meaning people donate money and manage a soup kitchen to feed people who are less fortunate than themselves. This type relies on volunteer help and charity; anyone who wants soup does not have to do anything except walk through the door and eat.

Nancy says that at first she thought the Charity model was the best type. She worked hard in such soup kitchens, and after a few years became the paid manager of one. The organization she manages had two part-time staff members, and an abundance of volunteers who would come in to serve the 200 or so simple hot lunches that were prepared each day in a church basement. Most of the food was donated through a local food bank. The soup kitchen was governed by a board composed of individuals who wanted to help people less fortunate than themselves.

After some time, Nancy began to have doubts about the Charity model. Her misgivings were triggered by some of the things she heard from the people who came there to eat. She heard them say things like: "I never thought I'd drop so low as to become a charity case." "I feel that I have no more dignity." "It is humiliating for me to be here." Nancy describes how this affected her:

"I started to think about those comments. And I talked about the comments with my friends and associates. Were we robbing people of their dignity? Was our organization designed in such a way that we could not help but rob people of dignity? It bothered me to see how the attitude of our 'regulars' seemed to change. At first, they felt badly because they did not have anything to contribute to the organization. Then, after a while, they started to think that they should not contribute anything.

I listened some more, and asked probing questions. I tried to put myself in the shoes of the people who came to eat our soup. Would I like to be treated as a charity case? What would it do to me, to my sense of self-worth, to depend on hand-outs?

I started talking about my concerns with my board members. I thought that they would provide a receptive ear. And at first they did, but they resisted any suggestion I made *about transforming the way our organization was designed, or trying to move toward a 'Dignity' model.*

I became almost obsessed by my frustration with the Charity model. Finally, the board gave me an ultimatum: Accept the current organization design, or quit.'"

Nancy asks if you would be willing to give her some advice on designing a Dignity model organization, one where clients do not lose their sense of self-worth. She tells you that she has already made some progress in identifying sources where she thinks she could get food donations to start up such a soup kitchen, and she has some friends and acquaintances who would provide start-up money. She also says she has a site she could use. She just needs help in designing this new organization. How should it be managed? Who is welcome to join? How to start?

Managers have long sought to discover the "one best way" to structure an organization. But there is no *one* best way; rather, the best way to design an organization is to optimize the fit among a number of key elements.[2] **Organization design** *is the process of ensuring that there is a "fit" between how an organization manages its four fundamentals of organizing and its culture, environment, technology, and strategy.*

Although there is not one best way to organize, research suggests that it is helpful to think of four different generic organization design types. An **organization design type** *is a specific, coherent alignment among the four fundamental components of an organization's structure, culture, and strategy to fit the prevailing environment and technology.* In other words, there are four types of organizations where all the pieces fit together nicely, named: simple, prospector, defender and analyzer. These four generic organization design types are adaptable enough that they can be applied equally well to Financial Bottom Line (FBL), Triple Bottom Line (TBL) and Social and Ecological Thought (SET) management, though with different meanings and nuances.

Of course, suggesting that there are only four generic organization design types is obviously an over-simplification, but studying and understanding these four types has proven helpful to managers, scholars and students. This chapter will present a series of 2x2 tables that will help you think about an organization's structure, its culture, its environment and its technology. We then combine together this series of tables, along with strategy, and show how the pieces all fit together to form the four generic types of organization design. The art of balancing all these complex competing factors makes management challenging, interesting and, we believe, fun.

This chapter presents a series of 2x2 tables that will help you think about an organization's structure, its culture, its environment and its technology, and how they all fit together to form a coherent whole.

KEY ELEMENTS OF ORGANIZATION DESIGN

Organizational design has five key elements: structure (based on the four fundamentals of organizing), culture, environment, technology and strategy. Each element can be seen to have two key dimensions, which together result in four types.

FOUR TYPES OF ORGANIZING AND CULTURE

In this section we describe how the two main approaches to the four fundamentals of organizing presented in the previous chapter can each be combined to form two different continua, and we show how combining these two continua creates a 2x2 table that identifies four types of organizing. These four types of organizing draw attention to the formal structural arrangements and emphases that may be evident within organizations.

We then describe how these two continua and four organizing types are similar to a complementary four-part typology in the organizational culture literature, which is better to suited to understanding important informal factors at work in organizations. **Organizational culture** *refers to the set of shared values and norms that influence how members perceive and interact with each other and with other stakeholders*.[3] **Organizational norms** *are shared beliefs about social and task behavior in a group.* For example, many organizations have a "casual Friday" norm, which relaxes the dress code for Fridays (what attire is expected on Monday through Thursday, and what is acceptable on Fridays, are both norms in the organization). **Organizational values** *are the principles that organization members use to judge behavior and outcomes.* For example, the maximization of financial well-being is an important organizational value within FBL management, but the FBL approach does not attach much value to ecological externalities. Choices and behaviors in an FBL organization will reflect its value position. Some elements of an organization's culture and values may be highly formalized (e.g., included in its mission statement), but many aspects of organizational culture and values remain informal. For example, as was noted in the previous chapter, standardization can be formal or informal.

An organization's (formal) structure and its (informal) culture can be seen as two sides of the same coin.

In this section we will demonstrate the merit of treating (formal) organizational structure and (informal) organizational culture as two sides of the same coin. In particular, we will show how the four types of organizing, and the four types of organizational culture, can be combined together to create the basis for our four generic organization design types.

The mechanistic-organic continuum

The FBL approach to the four fundamentals of organizing that were described in the previous chapter are often combined to form an overarching continuum that goes from a mechanistic structure to an organic structure (see Figure 12.1).[4] A **mechanistic structure** *is characterized by having prescribed standardization, narrow specialization, concentrated centralization, and functional departmentalization*. The U.S. Postal Service is a mechanistic organization, where there are highly developed standards, job descriptions, and top-down decision-making mechanisms to guide work. In contrast, an **organic structure** *is characterized by non-prescribed standardization, broad specialization, diffuse centralization, and divisional departmentalization*.[5] An example of an organic structure is a neighborhood "ultimate Frisbee" league where players show up if they are available and are divided into different teams each week. This organic-mechanistic continuum is the most widely recognized contribution in the organization design literature.[6]

Figure 12.1: A continuum showing the two types of FBL organization structures

MECHANISTIC		**ORGANIC**
prescribed	**standardization**	non-prescribed
narrow	**specialization**	broad
concentrated	**centralization**	diffuse
functional	**departmentalization**	divisional

The logic behind the mechanistic-organic continuum is that there are inter-relationships among each of the four FBL fundamentals of organizing. For example, a mechanistic structure is evident when there is a particular emphasis on each of the four fundamentals. Thus, managers who emphasize prescribed *standardization* (by developing manuals filled with policies and rules) also tend to emphasize narrow *specialization* (by developing detailed job descriptions). They emphasize concentrated *centralization* (with most decision-making authority concentrated at the top of a clear hierarchy of authority), and tend to favor functional *departmentalization* (because it is easier to manage groups of people with similar functional skills than groups of people with diverse backgrounds). In sum, in a mechanistic structure the four fundamentals of organizing fit together to form a coherent whole that operates like a well-designed machine. Generally speaking, organizations become more mechanistic as they increase in size, because a mechanistic structure is perceived to offer more efficient mechanisms to coordinate the work of hundreds and thousands of employees.

To see how the four FBL fundamentals fit together for an organic structure, let's discuss them in the opposite order. To begin, recall that managers in a divisional structure must coordinate the work of a variety of functional backgrounds (e.g., marketing, finance, and production). Because it is unlikely that a division manager will have full expertise in all these different areas, it is appropriate for the manager to have more diffuse centralization, delegating decision-making authority to subordinates who have the expertise. As members interact and work together with people from different functions, their specialization will broaden as they understand how the different functions fit together in the work of the division. Finally, because of this diffuse decision- making authority and collaborative specialization, it will be relatively difficult to prescribe highly-developed procedures and uniform *standards* for the overall work of members. Thus, in an organic structure the four fundamentals of organizing also fit together to form a coherent whole, but the structure operates in a less machine-like fashion and is more like a highly-adaptive organism.[7]

The organic-mechanistic continuum not only captures conventional FBL fundamentals of organizing, but it is also is consistent with research in the literature on organizational culture. The best-known typology of organizational culture[8]--called the Competing Values Framework[9]--is built on research that suggests that two dimensions of organizational culture are particularly helpful for understanding organization design. The first dimension, adaptability versus predictability, where **adaptability**, *refers to organizations that tend to place greater value on flexibility and change,* and **predictability** *refers to organizations that tend to place greater value on stability and control.* In organizations with an adaptability culture, members thrive on not knowing what sorts of things will come up at work during any particular week. In contrast, in a culture of predictability, members thrive when they know exactly which day and time they have regular meetings, when reports are due, and so on. The adaptability-predictability continuum complements the mechanistic-organic continuum. Adaptable cultures tend to have an organic structure, and predictable cultures tend to have a mechanistic structure.

Adaptability *cultures tend to have an organic structure, and* predictability *cultures tend to have a mechanistic structure.*

The internal-external focus continuum

In the second continuum from the organizational culture Competing Value Framework, internal versus external focus, **internal focus culture** *refers to organizations that tend to place relatively more value on treating the organization as a means to meet the needs of its members,* and **external focus culture** *refers to organizations that tend to place greater value on members as a means to meet the needs of the organization.* Greyston Bakery's motto—that it bakes brownies in order to hire people, rather than hiring people to bake brownies—indicates that is has an internal focus. In contrast, impersonal organizations—where members are treated as a "number"—are more likely to have an external focus.

As shown in Figure 12.2, this organizational culture internal-external focus continuum is complementary to a continuum created based on the four SET fundamentals of organizing.[10] In an **internal focus structure**, *the four SET fundamentals of organizing emphasize stakeholders within the organization's boundaries,* whereas in an **external focus structure** *the four SET fundamentals of organizing emphasize stakeholders beyond the organization's boundaries*.

Figure 12.2: A continuum showing the two types of SET organization structures[11]

INTERNAL FOCUS (emphasize stakeholders *within* an organization's boundaries)	⟵⟶	**EXTERNAL FOCUS (emphasize stakeholders *beyond* an organization's boundaries)**
improve operations with and for internal stakeholders	**experimentation**	improve relationships and links with external stakeholders
focus on opportunities with and for internal stakeholders	**sensitization**	focus on opportunities with and for external stakeholders
respect co-workers	**dignification**	respect external stakeholder
include all members	**participation**	include external stakeholders

As with the FBL mechanistic-organic continuum, the logic behind the SET internal-external focus continuum is that the four SET fundamentals of organizing are inter-related. In an internal focus structure, when members treat each other with respect (i.e., internal dignification), there is also likely to be an emphasis on mutual decision-making among members (internal participation), members are likely to be attuned to one another's work to look for new opportunities to improve the tasks they perform (internal sensitization), and they will seek new ways to improve internal operations (internal experimentation). The four fundamentals thus form a self-reinforcing system, where emphasis on any one factor is expected to be associated with a similar emphasis on the others. This interplay between the four fundamentals is evident at Semco, which emphasizes an internal focus structure (see Chapter 11). Under the management of Ricardo Semler, members choose their own hours, experiment with different jobs, and call meetings to initiate change whenever they find worthwhile opportunities to do so.

Similarly, for an external focus organization structure, when managers place a great deal of emphasis on treating external stakeholders with respect (and especially stakeholders who are not well-served by the status quo) there is external dignification, and it follows that the advice of these stakeholders will be sought (external participation), that stakeholders will look for ways to improve overall multi-stakeholder well-being (external experimentation), and seek new ways to improve the effect of the organization's activities on external stakeholders (external sensitization). Grameen Bank, described in the opening case in Chapter 6, provides an example of an external focus organization where poor people are treated with dignity and are important participants in the structure of the Grameen Bank. Members are especially sensitive to the needs of the marginalized (women and children), and are willing to experiment with new products (e.g., such as introducing programming that provides loans to beggars).

Of course, as with mechanistic-organic continuum, and as with the Competing Values Framework, the internal-external continuum does not *perfectly* describe what goes on in all organizations. However, it does provide a helpful conceptual framework to think about the four fundamentals of organizing from a SET perspective, and how they are related to organizational culture. In particular, the internal-external focus continuum is helpful for thinking about how to develop and manage a SET organizational structure, and how changes in one of the SET fundamentals of organizing can affect the other three. Managers must ensure that there are consistencies in the way the various fundamentals of organizing are managed.

Four generic types of organizing and culture

The two continua in Figures 12.1 and Figure 12.2 can be combined to create a 2x2 table (see Table 12.1) which gives rise to four types of organizational structures: familial, programmed, pioneer and outreach. Table 12.1 also lists the four complementary organizational cultures: clan, hierarchy, adhocracy and market. We will describe each in turn; together they are a solid foundation for the four generic organization design types.

A *familial structure* is organic and has an internal focus, and is often found in smaller organizations. It is evident in the networks of distributors who work in an FBL firm like Amway, where salespeople look out for each other, and there is a strong incentive for senior people to nurture and help junior people to increase sales.[12]

Table 12.1: Four generic types of organizing and culture

	Internal focus structure Internal focus culture	External focus structure External focus culture
Organic structure Adaptability culture	*Familial structure* *Clan culture*	*Pioneer structure* *Adhocracy culture*
Mechanistic structure Predictability culture	*Programmed structure* *Hierarchy culture*	*Outreach structure* *Market culture*

A *familial* structure is also evident in smaller craft-based TBL firms like Botanical Paperworks,[13] which makes hand-made paper for special events like wedding invitations. And it is evident in a SET firm like Greyston Bakery which provides jobs, training, and work-based and personal support for chronically unemployed people. Similarly, the *clan culture* values flexibility and an internal focus, and emphasizes cohesiveness, morale, and the development of its members. It is characterized by teamwork, participative decision-making, and is comfortable with high levels of openness. This culture is attractive for members who value affiliation, mutual dependence, long timelines, and interpersonal relationships and processes. Compared to the other types of cultures, the clan culture tends to place particular emphasis on internal social well-being.[14] Like its familial structure twin, the clan culture is evident among the distributor groups in Amway (FBL), the papermakers at Botanical Paperworks (TBL), and the staff at Greyston Bakery (SET).

A *programmed structure* is mechanistic and has an internal focus. A programmed structure is evident in the thousands of FBL-managed overseas garment factories in countries like Bangladesh, which place relatively high emphasis on an FBL mechanistic structure, and at the same time are facing increasing pressures from external stakeholders (e.g., human rights activists, concerned consumers) to adopt more characteristics associated with an internal focus structure.[15] Another variation of a programed structure is illustrated by TBL on-line fashion retailer Everlane, which sources all its clothing from socially responsible garment factories.[16] A final variation is the SET-managed Uganda-based operations of *31 bits,* where single mothers produce jewelry with recycled paper (Chapter 1). Each of these firms has a mechanistic structure and an internal focus. Similarly, a *hierarchy culture* values predictability and an internal focus, and emphasizes bureaucratic information management and communication. It is characterized by its emphasis on minimizing costs, smooth operations, and dependability. This culture is attractive for members who value certainty, long timelines, security, routinization, and the systemic analysis of facts in order to find the one best way to perform tasks.[17] Many elements of the hierarchy culture are evident in organizations like garment factories in Bangladesh (FBL), Everlane (TBL), and *31 bits* (SET).

A *pioneer* structure is organic and has an external focus. It is evident in innovative FBL organizations like Apple Inc. (though not in its overseas FBL factories that manufacture its products, which would be more likely to have programmed structures[18]), TBL organizations like Tesla Motors,[19] and the SET organization Grameen Bank. Similarly, the *adhocracy culture* values flexibility and an external focus, and emphasizes dynamism, innovation, and growth. It is characterized by its emphasis on being willing to take risks and being on the cutting edge. This culture is attractive for members who value growth, variation, uncertainty, risk and excitement, a future-orientation, and mutual influence with external stakeholders.[20] It is also evident at Apple (FBL), Tesla (TBL), and the Grameen Bank (especially during its formative years) (SET).

Finally, an *outreach* structure is mechanistic and has an external focus, and is evident in FBL organizations like Goldman Sachs, which has very concentrated centralization,[21] and whose external focus is on enhancing financial well-being (and it has a poor reputation in terms of overall well-being).[22] It is also evident in a large TBL firm like 3M, whose external focus is evident in its engineers spending 15% of their time working on new product ideas that they think will serve the needs of the marketplace. The characteristics associated with an outreach structure are evident in the SET organization Habitat for Humanity, which has a well-developed formal structure and is always seeking to increase its support and the number of homes it can build for under-housed people.[23] Akin to the outreach structure, the *market culture* values predictability and an external focus, and emphasizes competitiveness, results, and constantly improving operations. It is characterized by its emphasis on planning, goal-setting, and efficiency. This culture is attractive for members who value short timelines and high certainty, coupled with a need for achievement and independence.[24] It is evident at Goldman Sachs (FBL), 3M (TBL), and Habitat for Humanity (SET).

FOUR TYPES OF ENVIRONMENTS

The **organizational environment** *consists of all the actors, forces and conditions outside the organization*. It is important to remember that the natural environment (e.g., ecosystems, weather, the biosphere) is different from the organizational environment. While the natural environment is an important part of the organizational environment, it is only one part; the organizational environment also includes a variety of social, political, and technological factors. And just as wildlife must "fit" within its environment (e.g., the number of deer or eagles that a geographic region can support is determined by the weather, supply of food, and predators), so also organizations must fit within their environment (e.g., the number of restaurants and gas stations a geographic region can support is determined by the number of people and cars, and ultimately by the capacity of the Earth's ecosystems to accommodate for negative ecological externalities being created by the food systems and GHG emissions associated with restaurants and gas stations).[25]

Just as wildlife must "fit" within its environment, so also organizations must fit within their environments.

Two dimensions of the external environment are of particular interest for organizational design: stability and munificence. **Environmental stability** *refers to the likelihood that there will be little change among the key stakeholders and resources in an organization's external environment.* Stability is evident when there is a secure source of supply, when demand is steady, when the technology does not rapidly change, and when government policies are predictable and consistent. There is considerable agreement about how this dimension should be managed vis a vis the mechanistic-organic continuum.[26] In a stable environment, a mechanistic structure that generates uniform quality and reduces inefficiencies is recommended. If an environment is changing, an organic organization structure is preferred, because it is more flexible and allows members to re-align the organization's products and services with changes in the environment on an ongoing basis.

The second dimension, **environmental munificence**, *refers to the availability of resources in the environment that enable organizations to grow and change.* The internal vs external focus continuum is helpful for understanding how organizations can manage to make their environments more munificent,[27] especially regarding the market's resources to support goods and services that enhance socio-ecological well-being.[28] For example, a firm like Tesla can achieve success only if it creates societal infrastructure so that customers can charge up their batteries, improves battery technology to increase driving distances, and builds cars that will be attractive to a marketplace that currently enjoys lower-priced gasoline-powered cars that are convenient to drive and refuel.[29] Companies like Tesla therefore adopt external focus structures to develop and enhance their market's munificence. In cases where the viability of an organization is threatened by a low-munificence environment, an internal focus structure may be most appropriate. For example, companies that rely on door-to-door sales may find it difficult to attract and retain staff, so they work had to provide social supports to retain them.[30]

As shown in Table 12.2, these two environmental dimensions give rise to four different kinds of environments: harsh, barren, prolific, and oasis.

Table 12.2: Four generic types of organizational environments

	Low munificence	High munificence
Changing environment	*Harsh environment*	*Prolific environment*
Stable environment	*Barren environment*	*Oasis environment*

A *harsh* environment is characterized by rapid change and low munificence. Organizations in a harsh environment need to: 1) constantly change to adapt their environment, and/or 2) create special mechanisms to stabilize/firmly secure their key resources and thereby decrease the impact of the changes. For an example of adapting, consider a neighborhood restaurant that, in order to accommodate the changing demographics in its community over time, changes from being a family friendly pizza place, to a young adult hang out, to a formal dinner place. An example of special mechanisms is evident when an organization secures long-term contracts that enable it to remain viable. Greyston Bakery (SET) has a contractual commitment from Ben & Jerry's ice cream to purchase most of the 6 tons of brownies Greyston produces each day.[31] Botanical Paperworks (TBL) uses its established reputation and ability to fulfill orders in a timely fashion to compete against its overseas lower-priced competitors, and Amway (FBL) establishes ongoing personal relationships with customers and distributors to protect itself from the ongoing stream of competitive products in its market.

A *barren* environment is characterized by stability and low munificence; managers therefore go to great lengths to retain the valuable resources that are in short supply. The stakeholders who provide key resources need to be attended to and coddled.[32] For example, sports teams attract and retain the best athletes via rich pay and benefits packages. For both *31 bits* (SET) and Everlane (TBL), this means going to great lengths to provide personalized messages for their supporting customers, especially highlighting the characteristics of their internal focus structure vis a vis the factory workers that manufacture the products they sell. For the garment factories in Bangladesh, the greatest resource is ensuring that they get orders from retailers, and so they often cut corners in manufacturing to keep costs as low as possible to keep their buyers coming back (FBL).

A *prolific* environment is characterized by rapid change and high munificence. Apple (FBL) is always looking for "the next big thing," and its successes (e.g., the iPhone. iTunes) pay for innovative products that are less successful (e.g., AppleTV).[33] Tesla (TBL) can also be seen as competing in a prolific environment, given the changes that are occurring in the automobile industry (e.g., changing consumer and regulatory demand for cleaner emissions) and growing munificence (e.g., government incentives in many jurisdictions to develop green technologies, the strong interest in Silicon Valley to find technological solutions to ecological problems, and the expanding infrastructure for battery charging). The environment of the Grameen Bank (SET) is also changing, in part due to Grameen's success in demonstrating that a financial institution can consistently be profitable while serving the world's poorest micro-entrepreneurs, which has prompted change in other organizations seeking to profit from this under-tapped market.

The *oasis* environment is characterized by stability and high munificence; it therefore attracts many competitors (which, over time, will reduce munificence). Organizations in this quadrant typically focus on growth, taking advantage of both existing and new opportunities while also reducing the number of competitors. Examples include Goldman Sachs (FBL) which, notwithstanding the changes since the 2008 financial collapse, is competing in a fairly stable and munificent environment (i.e., financial institutions continue to make a disproportionate amount of profits). Similarly, 3M (TBL) may be seen as competing in relatively stable environment (e.g., Scotch Tape, Post-It notes, Thinsulate) and also in new munificent environments (e.g., one third of 3Ms sales are generated by products that were launched within the past five years).[34] Habitat for Humanity (SET) also operates in an oasis environment because there is a stable supply of under-housed people, and there are always philanthropically-minded people willing to help (though perhaps never enough).

An oasis environment is characterized by stability and high munificence; it therefore attracts many competitors (which, over time, will reduce its munificence).

FOUR TYPES OF TECHNOLOGY

Technology *refers to the combination of equipment (e.g., computers, machinery, tools) and skills (e.g., techniques, knowledge, processes) that are used to acquire, design, produce, and distribute goods and services*. There are two key dimensions to technology: task analyzability and task variety. First, *task analyzability* refers to the ability to reduce work to mechanical steps and to create objective computational procedures for problem solving. High task analyzability tends to be associated with a mechanistic structure.[35] This is not limited to simple tasks; even something as complicated as building a car can be subdivided into many separate steps. In contrast, work that cannot be reduced to mechanical steps, even something as simple as an artist drawing a picture with a pencil, is typically associated with a more organic structure.

Second, *task variety* refers to the frequency of unexpected, novel, or exceptional events that occur during work. When tasks have low levels of variety, internal focus structures may be more appropriate than external focus structures. This includes situations where there are very routine tasks and managers need to keep workers engaged (e.g., door-to-door sales, assembly line work), and situations where the technology requires craftspeople. Developing an internal focus takes time. For example, Semco developed its internal focus by building up the capacity of employees to choose their own salary, set their own hours, and select their own managers. Part of this learning process can be enhanced by hiring practices, evident in Semco members' choosing their co-workers. It can also be managed like SouthWest airlines, where managers provide training programs for members to acquire the skills to exhibit and practice things like dignification, experimentation, sensitization, and participation.[36] When task variety is high, and especially if the causes of variety are external, an external focus structure may be more appropriate. These differences will become more apparent as we describe the four quadrants created when task analyzability and task variety are crossed, as shown in Table 12.3.

Table 12.3: Four generic types of organizational technologies

	Low variety	High variety
Low analyzability	*Craft technology*	*Non-routine technology*
High analyzability	*Routine technology*	*Engineering technology*

Craft technology is characterized by work that has low analyzability and low variety. Work in such an organization is often based on a lot of tacit knowledge that is applied in predictable settings. This might include the performing arts, teaching, and general management. Craft technology may also be evident in some "continuous process" organizations where much of the work is done by machines, but people's tacit knowledge is required to oversee the machines and ensure that they are operating properly. Just like teachers and artists, the workers are trouble-shooters where the nature of problems is often difficult to predict. Craft technology tends to fit with an internal focus structure and a more organic organization structure. A now-classic study by Joan Woodward found that continuous process manufacturers achieved higher financial performance if they had a more organic organization structure (due to challenges in standardizing a continuous process).[37] Examples of craft technology include the work of personal sales in Amway (FBL), hand-made paper-making at Botanical Paperworks (TBL), and the art of baking products for high-end restaurants at Greyston Bakery (SET).

Routine technology is characterized by work that has high analyzability and low variety. Work in such organizations can be broken down into separate steps and there are few exceptions to standard ways of operating, thus lending itself to a mechanistic structure. A common example is traditional assembly-line technology. Jobs like bank tellers, data entry workers, or toll-booth operators would also be highly routine. Routine technology that is coupled with an assembly-line technology has been associated with increased financial performance, as is the case in garment factories in Bangladesh (FBL). These jobs also lend themselves to an internal focus structure, especially in situations where the workers themselves do not interact with external stakeholders, as is the case for employees performing routine tasks in Everlane (TBL) and *31 bits* (SET).

Non-routine technology is characterized by work that has low analyzability and high variety. Work in such organizations cannot easily be broken down into separate steps and there are many one-of-a-kind activities. An example is custom-built products and services, including jobs like innovative computer programmers, and researchers and strategists who do non-routine work. Joan Woodward found that when manufacturers relied on "small-batch" technologies to do custom work (e.g., unique short-run or one-of-a-kind products), then an organic organization structure was associated with increased financial performance because it was a better fit (again, due to challenges in standardizing a continuous process). This quadrant tends to be associated with an external focus structure, as innovative project-based computer work, custom jobs, researchers, and strategists all do well if they are closely attuned to external stakeholders. Examples include Apple Inc. (FBL), Tesla (TBL), and the Grameen Bank (SET).

By combining the 2x2 frameworks we have presented thus far, we can identify four generic types of organization design: simple, defender, prospector, and analyzer.

Engineering technology is characterized by work that has high analyzability and high variety. Examples include the work of engineers, lawyers, and tax accountants. The most appropriate structure for this technology is mechanistic[38] with an external focus. Examples include Goldman Sachs (FBL), 3M (TBL), and Habitat for Humanity (SET).

Four Generic Organization Design Types

By combining the 2x2 frameworks we have presented thus far, we can identify four generic types of organization design: simple, defender, prospector, and analyzer.[39] As depicted in Table 12.4, these four generic types tend to be aligned with specific configurations of structure, culture, technology, and environments that we have discussed in this chapter. Note also that each generic organization design type is related to one of the generic strategies that was discussed in chapter 9.

Of course, keep in mind that reality is much more complex than this relatively simple four-part typology. For example, in the real world there is considerable variation among organizations *within* each generic organization design type. Consider this analogy: even though there are basic generic types of motorized vehicles (e.g., motorcycles, cars, vans, trucks, etc.) and each composed of similar components (e.g., an engine, tires, a seat, a steering wheel), there can still be a lot of variation within any one of the types (e.g., a car could be a Smart car, a Ferrari, a Rolls-Royce, or many other variations). So, in spite of the simplification, the 2x2 tables and four-part typologies presented in this chapter have proven very useful for managers and scholars alike.

Table 12.4: Four generic types of strategic organization design

GENERIC DESIGN TYPE **Generic strategy**	**SIMPLE TYPE** **Focus** *Familial structure* *Clan culture* *Harsh environment* *Craft technology* **Examples:** *Amway (FBL)* *Botanical Paperworks (TBL)* *Greyston Bakery (SET)*	**PROSPECTOR TYPE** **Differentiation/transformer** *Pioneer structure* *Adhocracy culture* *Prolific environment* *Non-routine technology* **Examples:** *Apple Inc (FBL)* *Tesla Motors (TBL)* *Grameen Bank (SET)*
GENERIC DESIGN TYPE **Generic strategy**	**DEFENDER TYPE** **Cost leadership/minimizer** *Programmed structure* *Hierarchy culture* *Barren environment* *Routine technology* **Examples:** *garment factories in Bangladesh (FBL)* *Everlane (TBL)* *31 bits (SET)*	**ANALYZER TYPE** **Dual/Compounder** *Outreach structure* *Market culture* *Oasis environment* *Engineering technology* **Examples:** *Goldman Sachs (FBL)* *3M (TBL)* *Habitat for Humanity (SET)*

A generic **Simple organization design** *tends to have a focus strategy, a familial organization structure and clan culture, a harsh environment, and a craft technology.* Think of a small start-up family firm with a focus strategy (which may focus on one of a cost leader, differentiation, minimizer, or transformer), an organic and internal focus structure and culture, that is operating in a changing environment (indeed, simply by being a start-up it is bringing change to that environment) where it is seeking to establish access to the resources it requires, developing an appropriate technology for its work, and where members value flexibility and cohesiveness. All these pieces fit together to form a coherent whole.[40]

Amway, especially at the distributor level of analysis, is an example of an FBL Simple organization. Amway tends to have a differentiator strategy where each distributor focuses on their own region, and works with their leader and subordinates in relatively small units. Botanical Paperworks, which is an example of a TBL Simple organization, also has a focused differentiation strategy that offers custom handmade and ecologically-aware paper products (e.g., greeting cards). Greyston Bakery, an example of a SET Simple organization, has a focused transformer strategy that offers employment opportunities to the chronically unemployed.

A generic **Defender organization design** *tends to have a cost leadership or minimizer strategy, a programmed organization structure and hierarchy culture, a barren environment, and a routine technology.* Garment factories in Bangladesh have the hallmarks of an FBL Defender organization. They have a cost leader strategy, compete in a relatively stable environment, have well-developed mechanistic structures (e.g., many prescribed standards, detailed policies, guidelines, and job descriptions, and a clear hierarchy where decision-making authority is concentrated in top managers). They are typically functionally departmentalized (which further enhances specialization in the functional areas of expertise). The most powerful departments within a Defender type tend to be Production and Finance, which reflects FBL management's focus on maximizing efficiency, productivity and financial well-being; this is consistent with pursuing a cost leader strategy in a stable and well-defined environment. Defenders often have a single core technology, which they have mastered in terms of analyzability and variety, and they constantly fine-tune it to maximize efficiencies.

Everlane, an example of a TBL Defender, exhibits many of these characteristics, but as a TBL cost leader/minimizer it also seeks to minimizes negative social externalities in the workplace. By dealing directly with TBL suppliers and by selling on-line, Everlane is able to reduce its financial costs and provide customers with high quality products with reduced negative externalities at a lower price than its competitors. *31 bits*, an example of a SET Defender,

By dealing directly with TBL suppliers and by selling on-line, Everlane is able to reduce its financial costs and provide customers with high quality products with reduced negative externalities at a lower price than its competitors.

minimizes both social and ecological negative externalities (by hiring single mothers to make jewelry using recycled paper),[41] and emphasizes its internal focus structure by providing its employees with numeracy and literacy training.

A generic **Prospector organization design** *tends to have a differentiation or transformer strategy, a pioneer organization structure and adhocracy culture, a prolific environment and a non-routine technology*. Apple Inc., an example of an FBL Prospector, uses a differentiation strategy to bring new products to the market that consumers are willing to pay extra for. It creates or develops new munificent markets in environments where other firms have not been able to (e.g., tablets, smart phones, iTunes), it uses non-routine technologies, and it has an adhocracy culture.[42]

Tesla Motors, an example of a TBL Prospector, sums up its differentiation strategy in its advertising slogan: "Zero Emissions. Zero Compromise."[43] In order to succeed in the automobile industry, Tesla needed to not only invent a better car, but also to convince consumers it was worth giving up some of the conveniences of gasoline powered cars, to develop a nationwide re-charging infrastructure, to improve the quality of rechargeable batteries, and so on. Tesla has an impressive track record in addressing these challenges.

Tesla Motors, an example of a TBL Prospector, sums up its differentiation strategy in its advertising slogan: "Zero Emissions. Zero Compromise."

The Grameen Bank, an example of a SET Prospector, has transformed the lives of micro-entrepreneurs from the poorest half of the world, taking their under-utilized and often exploited labor and helping them to create jobs and economic well-being that permits them and others to escape poverty. It has been a model Prospector not only in Bangladesh, but also for the larger international development community, and for existing banks who notice that it is possible to make a profit by serving what was previously considered to be a low munificence, unbankable, sector of society.

Finally, a generic **Analyzer organization design** *tends to have a dual (cost leader plus differentiation) or compounder (minimizer plus transformer) strategy, an outreach organization structure and market culture, an oasis environment, and an engineering technology*. Think of an organization that has two spheres of operations, with one part of the organization operating like a Defender, and another part operating like a Prospector type. Analyzers' structures are often hybrid to accommodate their two spheres of operations. This includes both functional departments (with many standards, narrow specialization, and concentrated centralization) and divisional profit-centers (e.g., product or regional departments that act as self-contained profit centers and have relatively few standards, broad specialization, and diffuse centralization), and both an internal and external focus.

FBL Analyzer organizations use a cost leader strategy and predictable technologies in stable sectors of the environment, and a differentiation strategy and evolving technology in changing parts of the environment. Goldman Sachs, an example of an FBL Analyzer, has for over a century been an investment bank focusing on high-net-worth clients and corporations, but in 2016 it launched GS Bank to provide retail banking services for average Americans (i.e., "the 99%").[44] Accessing this source of deposits gives Goldman improved stability and security, but it also requires it to become aware of a brand new market where it has little experience—it is very different to serve someone with $100,000 in life savings than catering to someone with $20 million. GS Bank can pursue a cost leadership strategy because it is totally on-line and thus does not need to pay for bricks-and-mortar retail bank buildings.

3M, an example of a TBL Analyzer, has long been known for its dual focused strategy. On the one hand it manages a very successful line of products, but on the other it pays employees to spend 15% of their time inventing new products. Its 3P (Pollution Prevention Pays) program has reduced pollution by 4 billion pounds of pollution and saved about $2 billion since being implemented in 1975.[45]

Finally, Habitat for Humanity, an example of a SET Analyzer, is known for its compounder strategy. On the one hand, its 1,000 ReStores follow a minimizer strategy, by accepting and re-selling items that would normally go the landfill. On the other hand, it follows a transformer strategy that allows under-housed families to live in new homes. A recent study by the Boston Consulting Group shows that each new house Habitat builds creates about $175,000 in positive externalities (e.g., because new homeowners perform better at work due to reduced sick days, pay more taxes, and so on).[46]

Each new Habitat for Humanity *home creates about $175,000 in positive externalities.*

ENTREPRENEURSHIP IMPLICATIONS

In this section, we examine some of the implications of organization design for entrepreneurs, both in terms of how entrepreneurs can use the tools in this chapter to make decisions, and also how research findings point to certain constraints on the options available. But first we highlight aspects of the cultural environment that entrepreneurs should take into consideration when choosing their strategy and design.

CULTURE IN THE ENVIRONMENT

Recall that organizational culture consists of shared values and norms among members. However, culture also exists outside of organizations, and can powerfully influence the success of an organization.[47] Entrepreneurs must pay attention to both societal and industry culture when they design their organization's structure. For example, in some countries it is normal and valued for authority to be centralized at the top of the organization's hierarchy (e.g., India, Malaysia, Philippines), whereas other countries value authority being diffused throughout an organization (Austria, Denmark, Israel).[48] This provides direction for how organization structures should be designed, and also explains why the same organization design can be interpreted differently by members in different countries. In Mexico, where people tend to have a high deference to authority, managers who try to empower members and promote participative decision-making may be perceived as shirking their leadership responsibilities. In contrast, in Israel, where people tend to have a low deference to authority, managers who try to use a centralized decision-making approach may face resentment from members.

Industries can also display aspects of culture that may influence the operation of an entrepreneurial organization. For example, SET entrepreneurs may have difficulty acquiring financial resources if investors predominantly value FBL management, though the rapid growth of socially responsible investing suggests that in the future this situation may reverse, and conventional FBL entrepreneurs may find themselves struggling to win support from SET-oriented investors. Likewise, if there is a dominant organization in the industry, it may have shaped practices to its benefit, and in ways that make it more difficult for new firms to enter. For example, suppliers who are particularly dependent on Walmart may design their firm's information systems to fit with the system used at Walmart. Any entrepreneur intending to supply Walmart, or to work with its existing suppliers, would have to adjust organizational systems to suit. As these examples show, in thinking about the best organizational design, entrepreneurs must consider the details of their environment.

ENTREPRENEURIAL OPTIONS IN ORGANIZATION DESIGN

For the reasons discussed in Chapter 11 (e.g., task ambiguity, lack of routines, undefined market, etc.), a classic entrepreneur—one who is starting an entirely new organization based on some innovation in product or service—is likely to create an organization with a relatively organic structure, and to place relative emphasis on the SET approach to the fundamentals of organizing. This fact has important implications for the entrepreneur's organization design. In particular, it suggests that most start-ups will adopt either a simple (organic with an internal focus) or prospector (organic with an external focus) organization design.

Most start-ups will adopt either a simple *(organic with an internal focus) or* prospector *(organic with an external focus) organization design.*

Of course, any organization can have any design its founder wishes, but if the design does not fit the environment and technology, the new organization will struggle to succeed. As we have seen in this chapter, the simple or prospector designs are well-suited to particular types of environments, technologies and strategies. A simple structure is especially appropriate when the entrepreneur perceives the environment to be changing and having low munificence. This describes entrepreneurs who are relatively new to an industry (and thus always learning something new about it) and do not yet have stable customers. A simple structure is also appropriate when the entrepreneur is not yet aware of the best technology to use, and when they tweak things until they figure it out. Here a focus strategy works best, as the entrepreneurial organization seeks to find its place in its industry over time.

A prospector structure is especially appropriate when the entrepreneur perceives the environment to be changing and having high munificence. This describes entrepreneurs who are relatively new to an industry or perhaps entering a relatively new industry (and thus always learning something new about it), and where there is a strong demand for their new product or service. A prospector type is also best when the entrepreneurial is not yet aware of the best technology to use to deliver its product or service, and there is a lot of variety in tasks. Here a differentiation or transformer strategy works best, as the entrepreneurial organization finds its place in the industry.

Taken together, entrepreneurs need to be careful to analyze their environment and technology when designing their organization. If the environment is stable, they may wish to target sub-environment that is changing. If the technology is highly analyzable, they may wish to focus on an emerging technology that is less analyzable. For example, the founders of Warby Parker knew they could not compete with Luxottica directly in the mainstream eyewear industry that was fairly stable and analyzable. So Warby Parker focused on selling eyewear online—an emerging, less stable but potentially munificent segment of the industry—and on coupling fashionable frames with a social mission. To enter this market successfully the founders spent two years developing the most appropriate organization design for their start-up.

If the environment is stable, entrepreneurs may wish to target a sub-environment that is changing.

Looking at this a bit differently, there are organization designs that entrepreneurs might want to avoid. The limited design options may be most salient for FBL entrepreneurs because of their focus on maximizing economic outcomes. Consider the case of the defender type. To fit this generic design, the entrepreneur would need to adopt a cost-leader strategy, which often favors large-scale production that creates economies of scale or some other cost-saving advantage. A start-up is unlikely to have access to such resources. Likewise, the prototypical defender context is an industry with a stable, well-established market, routine technology, and low munificence. This combination of features creates significant barriers to entry. Imagine trying to start-up a new online bookstore. Buyers have been conditioned to expect cheap books, the technical aspects of online book shopping are clearly defined, and there is already a dominant organization in the industry. Why would publishers want to enter into deals with your bookstore? How could you offer a price that was better than the competition's, especially while you are learning the technology and routines, and you are running an under-capitalized new firm with limited inventory? As you can see, the prospects for a defender start-up are not promising. Of course, as examples like Warby Parker attest, there are exceptional start-ups that compete successfully against a dominant firm, but those start-ups typically require extraordinary planning and a significantly different supply chain and value proposition (e.g., based on SET management).

The likelihood of an FBL analyzer start-up is equally low. The munificence of the environment in a stable market will have attracted other firms and there are likely to be one or more cash cows in operation. That source of reliable income would allow incumbents to defend their position and out-compete start-ups. The engineering technology is complicated, and so favors established firms with more numerous and experienced members. It is hard to imagine that a classic FBL entrepreneur could expect to generate enough profit to attract investors and justify its operations. The most likely FBL success would be an organization started by a group of founders who have experience in an industry and are aware of under-tapped niches in the environment.[49]

Although TBL entrepreneurs may have some slight advantage here, even if they have identified a socio-ecological angle that incumbent FBL firms have ignored, a TBL-defender or TBL-analyzer start-up is still challenging. Perhaps, the most probable exception would be in the case of an FBL or TBL franchise. If the franchising support is sufficiently developed, and the established brand strong enough, it may be possible for a start-up to succeed as a defender or analyzer.

SET entrepreneurs will be the least constrained because competition is not as significant a concern for them. They do not need to make the most money or take anything away from others to be successful. As described in chapter 10, when Trevor Baylis brought his patented wind-up radio to the market in the 1990s, it was designed for a specific market (people living in African villages that did not have access to electricity and minimal access to news and information) and manufactured in a factory that hired under-employed people. In effect, the company he formed, Freeplay Energy, found an oasis within an electronics industry that was otherwise dominated by global giants. His start-up used a compounder strategy that reduced negative socio-ecological externalities by removing the need for batteries that were costly for villagers and that created toxic waste. Freeplay's design also enhanced positive externalities by creating jobs for the under-employed, and enabled villagers to access valuable information.

In sum, most entrepreneurs, regardless of their management approach, are likely to start-up with a simple or prospector design. It may be done through a focus strategy that maximizes fit in a specific niche (simple) or through a differentiation/transformer strategy that showcases the entrepreneur's innovation (prospector). The implication here is that entrepreneurs may do better to consider their positions on the horizontal dimensions of the typologies in this chapter (they likely have far less flexibility and variance on the vertical dimensions). Thus, though all start-ups are likely to be relatively organic, the entrepreneur needs to consider whether the structure and culture should be internally or externally focused. In part, this decision should reflect how munificent the environment is and how much task variety their work will involve.

CHAPTER SUMMARY

1. The basic elements that combine to form an organization design include: structure and culture, environment, technology, and strategy.

2. Structure and culture can each be depicted as having two similar underlying dimensions, which crossed together gives rise to four organizing or culture types:

The first dimension underpinning organizational structure is "organic vs mechanistic," which is similar to the "adaptability vs flexibility" dimension in organizational culture. The second dimension of organizational structure and culture is "internal focus vs external focus." Crossing these two dimensions yields four generic types of organizing (familial, programmed, pioneer, and outreach) and four generic types of organizational culture (clan, hierarchy, adhocracy, and market).

The two dimensions underpinning the environment are "changing vs stable" and "low versus high munificence." Crossing these yields four types of environments (harsh, barren, prolific, and oasis).

The two dimensions underpinning technology are "low vs high analyzability" and "low versus high variety." Crossing these yields four types of technology (craft, routine, non-routine, and engineering).

3. Overall, there are four generic types of strategic organization design, based on a fit between the various dimensions: simple (with a focus strategy), defender (with a cost leadership or minimizer strategy), prospector (with a differentiation or a transformer strategy), and analyzer (with a dual or compounder strategy).

Examples of FBL organizations for each organization design type include Amway (simple), garment factories in Bangladesh (defender), Apple (prospector), and Goldman Sachs (analyzer).

Examples of TBL organizations for each organization design type include Botanical Paperworks (simple), Everlane (defender), Tesla Motors (prospector), and 3M (analyzer).

Examples of SET organizations for each organization design type include Greyston Bakery (simple), 31 bits (defender), Grameen Bank (prospector), and Habitat for Humanity (analyzer).

4. Classic entrepreneurial start-ups are most likely to have a simple or prospector organization design.

Questions for Reflections and Discussion

1. Identify the five key elements of organization design. Which elements do you think are particularly important from an FBL perspective? A TBL perspective? A SET perspective?

2. Recall that in the first chapter we noted that conceptual skills are key for explaining which manages get promoted. Do you think that students who master this chapter are more likely to get promoted? Explain your reasoning.

3. Describe the four generic strategic organization design types. What are their key features? What are the key difference between the FBL, TBL, and SET types?

4. Visit an organization you are familiar with (e.g., perhaps a local soup kitchen) and interview the manager to determine how it operates and what kind of organization design it has. Briefly describe its structure, culture, environment, technology, and strategy. Would you classify it as an FBL, TBL or SET organization? Explain your reasoning. Also determine which generic organization design type it is most similar to. What advice would you give to its managers to develop a better fit among the elements of the organization design? If the organization already has a good fit, do you think that the organization will have to change to become a different organization design type in the next five years in order to maintain its fitness? Explain your reasoning.

5. Suppose that you are making plans to start-up a new organization and are designing an Entrepreneurial Start-Up Plan (ESUP) for it. What type of environment would that organization face? What technology would it use? Given these conditions, which generic organizational design would be best? Explain your reasoning.

6. In the previous chapter, you made choices about the four fundamentals of structure for your ESUP. Which kind of generic organization design do those choices imply? Is it the same as the one you chose in question 5 above? If not, what does that difference mean for your plans? What will you do in response?

Preview and Summary of Chapter 14

	FBL	TBL	SET
Types of change	Change varies based on: scope (transformational vs. incremental), preparedness (proactive vs reactive), and source (innovative vs imitative)		
Four phase process			
Phase #1: Recognize the need/opportunity for change	Recognize the need to **unfreeze**: Managers recognize a need/ opportunity, and develop a vision to address it.	Recognize a good time to **unfreeze**: Members recognize and discuss a TBL-based need/opportunity for change.	Recognize the need to **freeze** (e.g., press the "pause button"): Invite members to critically reflect on ongoing activities.
Phase #2: Prepare for change	Begin **unfreezing**: Managers convince members to embrace the change by overcoming their resistance to change.	Begin **unfreezing**: Involve members in developing a vision for change; enhances commitment.	**Praxis**: Invite experimental activities to address the problem/ opportunity.
Phase #3: Make the change	**Transition**: Managers use their authority to design and implement organizational changes.	**Transition**: Managers lead members in designing and implementing organizational changes.	**Transition**: Members reflect on praxis experiments which prompts them to change their worldview.
Phase #4: Safeguard the change	**Refreeze**: Managers promote social norms and develop structures and systems that reinforce and reward members who support change.	**Re-slush**: Support structures and systems that facilitate continuous learning and celebrate improvement.	**Resume**: Implement desired changes and then resume adaptive improvisation and learning (i.e., press the "play" button).
Intrapreneurship implications	The tools of organizational change, alongside strategic management and organization design more generally, are key to intrapreneurship.		

CHAPTER 14:
ORGANIZATIONAL CHANGE

Learning goals

After reading this chapter, you should be able to:

1. Explain how organizational change can vary in terms of its scope, preparedness, and source.

2. Describe organization life cycle theory and how it fits with the four generic types of organization design.

3. Understand the four generic phases of the organizational change process.

4. Explain how the organizational change varies in the FBL, TBL, and SET approaches.

5. Use the tools of organizational change, strategic management and organization design to support intrapreneurship.

FROM BEING WORTHY OF JAIL, TO CREATING NET POSITIVE EXTERNALITIES[1]

Interface Inc., a manufacturer of carpet tiles that that was founded about fifty years ago, is a well-known example of a traditional FBL business that has successfully managed to change, first into a TBL firm and then into a SET firm. A market leader in over 100 countries where it competes, Interface has about $1 billion in annual sales, 3,500 employees, and dozens of factories in half a dozen countries.[2] To change a business of this size takes considerable skill and time. The four-phase organizational change process at Interface is instructive.[3]

The first phase—recognizing the need or opportunity for change—started in 1994 when company founder and CEO Ray C. Anderson (1934-2011) was asked about Interface's environmental performance. This is something he had not given much thought to, so he did some research. He says it struck him "like a spear in his chest" when he found out that each year Interface manufactured $800 million worth of products by extracting over 6 million tons of raw resources and producing over

10,000 tons of solid waste, 60,000 tons of carbon dioxide, and 700 tons of toxic gases while contaminating over 2 billion litres of water. "I was running a company that was plundering the earth … someday people like me will be put in jail."[4] This prompted Anderson to develop a new vision for Interface: "Be the first company that, by its deeds, shows the entire world what sustainability is in all its dimensions: people, process, product, place, and profits by 2020." In short, Anderson wanted Interface to have net-positive ecological externalities, a challenge he likened to climbing higher than Mt. Everest.

While Anderson was convinced about the *need* for change, much work needed to be done to demonstrate the *opportunity* for change. His managers "needed to discuss whether it [would] be possible to create competitive advantages via sustainability."[5] This was uncharted territory not only at Interface, but also in the larger industry. To begin, Interface managers sought to understand what sorts of internal and external resources were available to address the challenge; this meant collecting and compiling existing information about policies, projects, green programs, eco-activities and human resources. This led to managers learning about biomimicry (where the waste of one organism becomes food for another), principles of green product design, material recovery ideas where waste became inputs, and process improvements that could come from redesigning manufacturing facilities. They soon discovered that such changes would take time, and would require considerable effort in preparing internal and external stakeholders.

The first phase ended with some TBL initiatives that Interface could implement relatively easily to create some "early wins" that would help to catalyze future action. By the end of this phase, Interface had tripled its profits, doubled its employment, and was recognized in the Fortune 100 list of "Best Companies" to work for. But these quick fixes were still within the TBL management paradigm, and Anderson wanted Interface to become a SET organization.

The second phase—preparing to implement the SET changes—began around 1999 and focused on getting members to buy into SET thinking. "Most of the managers viewed the new vision with hostility, confusion, and skepticism."[6] External consultants were brought in who held workshops designed to foster outside-the-box thinking and to help members develop a holistic vision of sustainability covering all areas of the business. Key aspects included new green business opportunities that could be created in-house or with external partners, and a deeper understanding of how Interface's new compounder strategy would differentiate the firm in the marketplace. Its mission was to become a corporation that cherishes nature (i.e., minimizes negative externalities) and restores the environment (i.e., enhances positive externalities). As Anderson put it: "For those who think that business exists to make a profit, I suggest they think again. Business makes a profit to exist. Surely it must exist for some higher, nobler purpose than that."[7]

The third phase—which involved actually implementing SET changes on an organization-wide basis—started around 2003. This phase focused on reinventing Interface's business model in terms of products, services, and processes. A key element in Interface's renewal process was for leaders to support individuals and teams who promoted green experiments and initiatives, signaling that sustainability was not a fad but instead the new normal. In particular, instead of the previous system where worn-out carpet found its way into the landfill (so-called "cradle-to-grave" products), Interface wanted the worn-out carpet to be re-used to make new carpet ("cradle-to-cradle" thinking).[8] By 2006, aided by new suppliers, Interface was the first in its industry to develop a commercial recycle and reuse system. By the end of this phase it had saved over $400 million in reduced waste, reduced the fossil fuel use by 60%, cut 82% of its GHG emissions relative to sales, and reduced water consumption by 66%, all while doubling its earnings.

In addition to enhanced ecological well-being, Interface also focused on social well-being, which Anderson referred to as the "soft side" of the business.[9] Anderson was thankful that others in the company rallied to this issue with the same passion he had for ecological well-being. For example, rather than exploit overseas working conditions, Interface built and operated its Asia-based factories to the same high standards as in North America, Europe and Australia. Interface also encouraged its members to become involved in their local communities, and successfully found ways to provide jobs in poor communities (Harlem, New York City). By 2004 Interface employees had volunteered almost 12,000 hours in community activities.[10]

The final phase, starting in 2008, was to safeguard the changes that had been made. This meant working with suppliers and customers to make sustainability the new normal in the larger industry,[11] so that Interface's SET analyzer organization design with a compounder strategy need not rely only on internal practices or specific leadership personalities. For example, as one manager explained: "It is important to connect sustainability with performance measures, managerial performance scorecards, staff's work duties, and the existing incentive systems."[12]

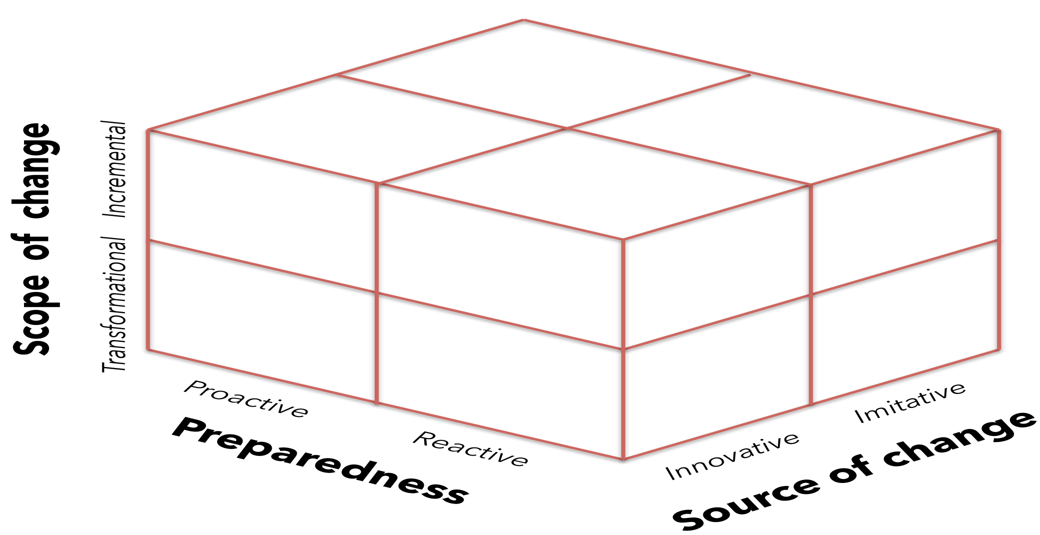
Taken together, the four-phase change process at Interface took over 15 years (5 years to recognize needs and opportunities and implement TBL initiatives, 4 years to prepare members for the SET change, 5 years to implement the SET changes, and 4 years to safeguard Interface as a SET business). Many transformational change attempts such as this do not make it past the first phase, and simply celebrate the "quick wins" without fundamentally changing the organization. Many other change attempts do not make it through the difficult work of navigating the second phase, where the focus is on getting members on board with the SET change. Once the first two phases have been completed, the actual change begins in the third phase, where success often depends on generating and receiving adequate support from external stakeholders (e.g., suppliers, customers, government regulations).

Thus far our discussion of the planning and organizing functions has focused on managing different processes within organizations, such as how to set goals and plans, how to develop strategy, how to set structure, and how to create coherent organization designs. These are challenging tasks for managers, but perhaps even more challenging is to *change* an organization's goals, strategy, or design, or to implement an intrapreneurial initiative. It is in times of change that the role of the manager is most visible and critical. We begin by describing three basic dimensions of organizational change and the eight specific types of organizational change that result from these three basic dimensions. We then describe the four-step change process that characterize the Financial Bottom Line (FBL), Triple Bottom Line (TBL), and Social and Ecological Theory (SET) approaches to transformational change. We conclude by discussing implications for intrapreneurship.

THREE DIMENSIONS OF ORGANIZATIONAL CHANGE

Organizational change *is the substantive modification of some aspect of an organization*. This can be a change to any one (or more) of the components that comprise an organization's design, including change to its structure (e.g., its place along the mechanistic-organic continuum), culture (e.g., the values of its members), environment (e.g., expansion into a new market), technology (e.g., the process used to transform inputs into outputs), or its strategy (e.g., including its mission and vision). In short, change can include just about anything that happens within organizations. Managing change is an integral part of every manager's job. How best to manage change is determined in part by what needs to be changed, and what type of change is needed. Figure 14.1 identifies three basic dimensions of change—scope, preparedness, and source—which combine to yield eight specific types of change.

Figure 14.1: A 2x2x2 cube that depicts 8 types of organizational change



1. SCOPE OF CHANGE: TRANSFORMATIONAL VS. INCREMENTAL

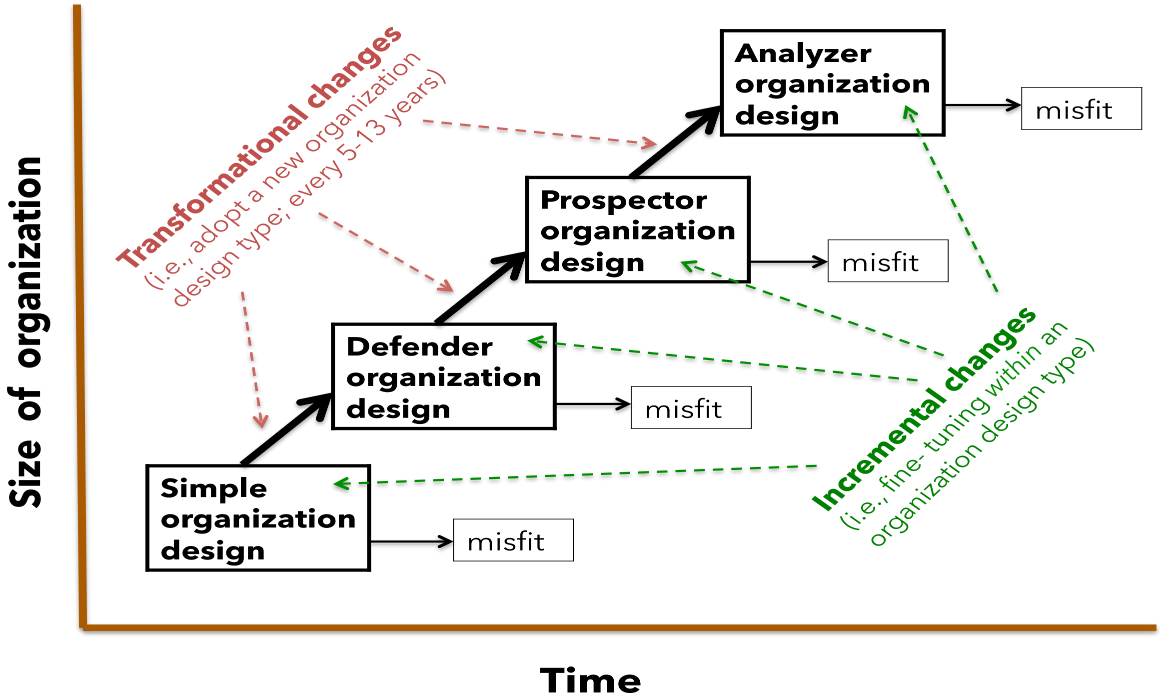
The scope of a change can be either transformational or incremental.[13] In simple terms, a **transformational** *change occurs when an organization shifts from one type of organizational design to another*,[14] while **incremental** *change occurs when an existing organization design is fine-tuned*. Transformational changes are more difficult to manage than incremental changes. Organizations spend most of the time in periods of "equilibrium" characterized by incremental changes that fine-tune an existing organization design type; these periods of equilibrium are occasionally interrupted or "punctuated" by bursts of transformational change where an existing organization design type is replaced with a new one.[15] From such a perspective, Interface Inc. was an FBL Defender prior to 1994, then underwent a transformational change to become a TBL Prospector by 1999, and then underwent another transformational change to become a SET Analyzer by 2012.

Organizations cannot simply identify the one best organization design, and then use incremental changes to improve that design indefinitely. Research suggests that organizations generally operate within a specific organization design for anywhere from 5 to 13 years, during which time managers fine-tune the elements of that design. After such a period of equilibrium, they will face internal and/or external pressures forcing them to abandon their existing organization design and adopt a new one.[16] This might be triggered when the CEO decides to address negative socio-ecological externalities, as Ray Anderson did in 1994. Or it might occur when what has been a stable environment for years suddenly becomes dynamic (e.g., when climate change threatens predictable weather patterns), or when a new technology is developed that renders a current technology obsolete (e.g., when jet engines replaced propeller engines, or when the internet replaced newspapers and regular mail). Because the separate elements of the design may change independently and pull the organization in different directions, "misfit" is inevitable (that is, proper-fit is compromised), and the tensions can only be resolved via transformational change.[17] In order for Interface to become the truly sustainable organization Anderson desired, it had to change from an FBL Defender to a TBL Prospector to a SET Analyzer.

A helpful and common way to think about this on-going back and forth between incremental/transformational change is captured by **organizational life cycle theory** *which suggests that, as they grow in age and size, organizations move in a predictable progression from one generic organization design to another*.[18] This theory is built on the metaphor that, just as humans go through a predictable life cycle (e.g., from childhood to youth to adult to old age), so also the sequence of organizational design types described in chapter 12 often proceed as follows: simple → defender → prospector → analyzer. A variation of life cycle theory, which is clearly a simplified description of the change process, is depicted in Figure 14.2.[19]

As organizations grow in age and size, they follow a predictable progression from one generic organization design type to another.

Figure 14.2: Organizational life cycle, showing transformational vs incremental changes



Entrepreneurs usually launch new organizations as organically-structured simple types that offer new products and services. As the simple organization grows in size, its operations become more established via a series of incremental changes that help to manage recurring environmental uncertainties. At the same time its technology becomes clearer and more analyzable, and its culture increasingly values predictability. Soon, managers are pushed to develop mechanistic administrative structures to accommodate its growth. In short, the simple organization is facing pressures to become a defender organization. Managers who are unable to bring this transition to fruition will find that their organization is stuck somewhere between a simple and a defender organization. It then becomes what is called an "administrationless misfit," where the different elements of the organization design no longer fit together to form a coherent whole.

A defender organization may enjoy success for many years of incremental change, but it inevitably becomes a "stifled misfit" unless it manages the transition to become a prospector type. For example, an FBL stifled misfit is one where the culture becomes so predictable and internally-focused, where decision-making is so concentrated atop the hierarchy, specialization so narrow, and standardization so prescribed, that members' creativity is stifled and the organization fails to respond to the changing needs of its customers.

Over time, prospector organizations are vulnerable to becoming "scattered misfits" where diffused decision-making authority and a lack of standardization across departments leads to failure. From an organizational life cycle perspective, a prospector can avoid failure by becoming an analyzer. Finally, over time the analyzer can become a "stressed-out misfit" because the ambiguity created leads to psychological stress and a difficulty to cope among members. What happens after the analyzer phase? An organization may get sub-divided into many smaller (simple) units and/or get "re-born" as a variation of one of the earlier types.

2. PREPAREDNESS: PROACTIVE VS REACTIVE

Change can also vary in terms of the preparedness of its managers.[20] When managers are on top of things and are effectively monitoring the fit (or lack of fit) among the key elements of their organization design (e.g., being aware of whether organizational structure and culture is aligned with changes in the environment or technology), then they can design and implement planned, proactive changes. **Proactive change** *is designed and implemented in an orderly and timely fashion*. Proactive change often occurs when managers see an opportunity to improve an organization's performance. When members perceive opportunities for change, they increase their support for change and decrease their support for the status quo.[21] Interface's changes in the opening case were planned, proactive changes.

In contrast, **reactive change** *involves making ad hoc or piece-meal responses to unanticipated events or crises as they occur*. Reactive change is often prompted by an unexpected threat facing the organization. A common problem faced by organizations is the failure of managers to anticipate or respond to changing circumstances; they are then forced to make unplanned, reactive changes. Sometimes reactive changes happen almost by accident without deliberate awareness on the part of managers, as an organization drifts from one way of doing things to another way. Reactive incremental changes rarely threaten an organization's survival, unless a firm finds itself unable to get itself out of a misfit stage. The danger of organizational failure is much greater in the event of unplanned reactive transformational change attempts, such as those prompted by the need to react quickly to unexpected strategic initiatives by competitors.[22]

3. THE SOURCE OF CHANGE: INNOVATION VS. IMITATION

A third dimension of change is whether it arises from innovation within the organization or from imitating what other organizations are doing. **Innovations** *involve the development and implementation of new ideas and practices*. Innovation was evident when Interface developed a new kind of nylon that could be reused indefinitely to manufacture carpets. **Imitation** *involves the application of* existing *ideas, which may come from other units within the organization or from outside of the organization*. Imitation was evident when Interface provided its nylon technology to other organizations in order to reduce the industry's overall negative externalities. Because imitative changes have a proven track record, they may be easier to manage than innovative changes.

As depicted in Figure 14.1, eight types of organizational change arise from these three basic change dimensions (scope, preparedness, and source). This chapter will focus on changes that are planned, transformational, and innovative because they are the most comprehensive example of the change process.[23] Transformational changes are more encompassing than incremental changes, innovative changes are more challenging that imitative changes, and planned changes provide a more complete picture of the four-phase change process than unplanned reactive change (for discussion of crisis decision-making, see Chapter 7).

THE FOUR-PHASE ORGANIZATIONAL CHANGE PROCESS

The most popular and influential contemporary models of organizational change have four phases: 1) recognize the need or opportunity for change; 2) deliberately prepare for the change process; 3) make the change; and 4) safeguard the change.[24] This four-phase process can be helpful for understanding all types of organizational change, but its full implications are most evident in changes that are proactive, innovative, and transformational. The first two phases would be much less well developed in unplanned, reactive changes.[25]

As depicted in the summary table at the beginning of this chapter, there is important variation but also considerable overlap among the three management approaches regarding the change process. FBL management is based on the classic idea that organizations seek to spend most of their time in periods of equilibrium where all the elements of an organization design fit together to form a coherent whole that enables it to maximize efficiency, productivity and financial well-being. In order to avoid becoming misfits, managers must occasionally make transformational changes where they "unfreeze" an existing configuration, implement changes, and then "refreeze" the organization until it is time to change again.

TBL management is similar, except that it seeks organizational design types that enhance profits by reducing negative socio-ecological externalities. Also, in contrast to the top-down approach of FBL management, the TBL approach places much greater emphasis on having all members participate in the freeze/change/refreeze process, and on understanding the dynamic way that the organization design elements fit together.[26]

SET management sees organizations like a movie, where it is occasionally important to press the "pause" button and see if a change should be made before pressing "play" again.

In SET management, thanks to its emphasis on participation and experimentation, there is more fluidity in behavior within each of the organizational design configurations than in either the FBL or TBL approaches. In the SET approach, it is advisable to occasionally "freeze" the action to see what is going on to determine whether change is called for.[27] Think of it this way: SET management sees organizations like a movie of a particular genre (e.g., a comedy, drama, or mystery), and every once in a while it is important to press the "pause" button and see if the movie is still good or if a change should be made (e.g., to the script, genre, characters, etc.), before pressing "play" again.[28] In contrast, FBL and TBL management are more likely to see organizations as a series of photos, where one photo captures how all the elements of an organization design are arranged in one era, and a second photo captures how the elements have been re-arranged after a transformational change and a new era has begun.

PHASE #1: RECOGNIZE THE NEED/OPPORTUNITY FOR CHANGE

To identify opportunities for change, managers rely on a variety of sources, including organizational members, customers, suppliers, formal information systems that monitor internal operations and the larger industry, and intuition that comes from having a deep understanding of existing operations. Change may be triggered by wide variety of factors, such as managers' recognition of depletion of raw materials that the company relies upon as inputs (e.g., coal and oil for energy companies), opportunities to reduce negative socio-ecological externalities (e.g., reduce income inequality), or a lack of employees with specific skills (e.g., lack of nurses in a hospital). Or an organization may need to respond to new government regulations (e.g., affirmative action programs, pollution regulations) or new directives from shareholders (e.g., greater transparency about the compensation packages of senior managers). Finally, organizations may need to respond to technological innovations by competitors or suppliers. Note that the same trigger event may prompt different reactions among managers. For example, in response to ecological concerns, some managers may embrace clean technology, while others may see a cost advantage in sticking with older, less environmentally-friendly, technologies.

Recognizing and responding to the need for transformational change often comes too late, resulting in misfit and eventual organizational failure.[29] In part this is because of the natural human tendency to exhibit a **threat rigidity response**[30] *where people who face a crisis, whether as individuals or in groups, tend to revert to familiar patterns of behavior that they perceive to have been successful in the past.* Sometimes reverting to past organizational designs is advisable, but sometimes it merely hastens the organization's demise, especially if the past design is partly responsible for the current crisis.

People who face a crisis, whether as individuals or in groups, tend to revert to familiar patterns of behavior that they perceive to have been successful in the past.

Other factors that make it less likely that managers will recognize the need for change were discussed in the decision-making chapter. These include *escalation of commitment* (people are overcommitted to the current way of doing things because they do not want to admit that their recent decisions were ill-advised), *information distortion* (the tendency to downplay information that suggests you are doing something wrong), *administrative inertia* (when existing ways of organizing persist simply because they are already in place), and *past success* (which blinds managers to internal and external signals pointing to the need for change). These factors all increase the likelihood of organizational failure, which comes when managers wait until the demise of an organization is imminent before beginning the costly and time-consuming transformational change process.[31]

FBL management and the need or opportunity for change

FBL management differs from TBL and SET approaches in two important ways. First, FBL management concentrates on looking for or recognizing needs/opportunities for changes that will help to maximize efficiency, productivity, competitiveness and financial well-being, and does so without proactively pursuing opportunities to reduce negative socio-ecological externalities. Second, FBL makes an assumption that it is the manager's job to identify opportunities and threats, and that it is the manager's job to develop the plan or vision regarding how to deal with these opportunities and threats.

TBL management and the need or opportunity for change

In contrast to FBL managers, TBL managers seek to enhance financial well-being by proactively addressing negative socio-ecological externalities. Like FBL managers, TBL managers also draw on their experience and unique organizational vantage point to identify areas that could be changed. But unlike FBL managers, for whom identifying areas for change is a top-down process, TBL managers are more likely to involve organizational members to jointly diagnose the information and ideas that might prompt change. In this way TBL management emphasizes participation and openness, which invites more members to become sensitized to the broader issues of concern for the organization and its stakeholders.[32] Managers at Interface Inc. spent four years discussing and developing a rich understanding of the needs and opportunities associated with enhancing socio-ecological well-being.

SET management and the need or opportunity for change

The TBL and SET approaches are similar, except that SET management has less need to maximize financial well-being; this gives SET organizations greater latitude to consider changes that enhance socio-ecological well-being. SET is also more likely to invite even broader participation in recognizing opportunities and the need for change, and in the merit in pressing the "pause" button (e.g., "listening" to the ecological environment). In particular, SET management is sensitive to the dignity needs of the least privileged in society, whether they are poor people in Bangladesh (see the Grameen Bank example in Chapter 6) or the under-employed in Philadelphia.[33]

PHASE #2: PREPARE FOR CHANGE

Once it has been established that there is a need for change (phase #1), one might expect that it should be easy to get everyone in the organization to be ready to hop on board. While this may be true for incremental changes, it is often not true for transformational change. Only about 25% of attempted transformational changes are successfully implemented.[34] An important reason change attempts fail is because of inadequate preparation prior to actually implementing the change. Preparing for change has a logistical/technical side (e.g., developing the vision, deciding on which market to enter, how to redesign jobs and structures and systems, what technology to use, etc.) and a human side (e.g., ensuring that members are willing to change). Often the technical side is easier to prepare than the human side.

Only about 25% of attempted transformational changes are successfully implemented.

The primary objective in this phase is to create a sense of openness and willingness to change within the organization. Ensuring that organizational members understand both the need for change and the nature of the change (i.e., the content of the technical side of change) helps to reduce resistance to change. Change can evoke a wide range of emotions from the people facing or experiencing it. The very nature of organizational change, whether planned or successful or not, often increases members' exposure to uncertainty, disrupts informal support networks, and entrenches the purposes and powerful position of management.[35] Under such conditions organizational members experience a loss of control and become dependent on managers to provide direction and stability. In short, change may take a heavy toll on participants even when it seems to be in the best interests of all organizational stakeholders,

As shown in Table 14.2, managers can draw on a variety of influence tactics to prepare members for change. Which tactics are emphasized varies according to the management approach being used, and whether managers are drawing attention to a *crisis* that *pushes* members to change, or to an *opportunity* that *pulls* members to change. Drawing attention to a crisis may include presenting members with alarming information or with the potential negative consequences of what will occur if they don't change. By contrast, drawing attention to opportunities includes suggesting that organizational members will be better off if they change. FBL management might emphasize pressure and exchange tactics when there is a crisis, but emphasize inspirational appeal and coalition tactics to prepare for opportunities. TBL and SET approaches place greater emphasis on consultation tactics when presenting both crises and opportunities, and SET management emphasizes praxis (described later). Often a two-step crisis→opportunity process works best: 1) make members aware of a crisis, and 2) overcome the threat rigidity response by making members aware of an opportunity or vision to resolve the crisis. A more fully-developed vision will lower members' uncertainty and resistance, and increase the likelihood that the transformation will succeed.[36]

Table 14.2: Influence tactics that can be used to prepare members for change[37]

Pressure:	Introduce or suggest threats or negative consequences
Exchange:	Indicate willingness to reciprocate or share benefits
Coalition tactics:	Appeal to the buy-in of others (e.g., a 3rd party) in attempt to persuade
Ingratiation:	Use praise, flattery, or friendly behavior before making a request
Rational persuasion:	Use logical arguments and factual evidence
Personal appeal:	Appeal to feelings of loyalty or friendship
Inspirational appeal:	Arouse enthusiasm by appealing to values, ideals, aspirations
Legitimizing tactics:	Appeal to an agreed-upon authority (e.g., a vision/mission/founder)
Consultation:	Involve others in planning or formulating an idea or strategy
Praxis:	Encourage practical action and critical reflection by members

Even if members recognize the crisis and/or opportunity that is prompting a change, and even if their uncertainty is reduced by spelling out a clear vision of the future, members still might resist the change if they feel the change is a violation of their psychological contract. A **psychological contract** can take various forms, but essentially it *is an unwritten expectation related to the exchanges between an employee and the organization*.[38] For example, an employee might feel the psychological contract has been violated when they are required to do more work—or to do more difficult work—than their job description indicates, but they are not offered a higher salary for doing it, thus raising the objection that: "I wasn't hired for this."

FBL management and preparing for change

Unlike TBL and SET approaches, FBL management tends to leave the development of the technical/logistical side of change to managers and experts. For example, the new vision is developed by top management, and human resource professionals develop the new job descriptions and designs. Thus, the FBL approach focuses on using influence tactics to sell management's vision of change to members. FBL managers explain or interpret the need and vision for change to members, and try to convince members of the merit of the manager's insight and plans for the change. The emphasis is on getting other members to "buy into" the ideas that management is promoting, and FBL managers are more likely to use instrumental exchange, pressure, and coalition tactics than TBL and SET managers.

TBL management and preparing for change

Unlike the FBL approach, where managers focus on influence tactics to overcome resistance by getting members to buy into their vision and the need for change, TBL management is more likely to use consultation and inspirational tactics to invite members to participate in developing the vision for the change. This approach creates a powerful sense of ownership and commitment, and this emphasis on consideration was already evident in phase #1, where members participate in recognizing the need for change. Such bottom-up involvement is more likely to naturally lead to a shared vision.[39] When you allow people to share in the process of gathering and assimilating information, it becomes theirs.[40]

Managers often believe that empowering others dilutes their own power; in fact, sharing control can actually empower both parties.

By involving members in establishing the vision of an organization, TBL management not only empowers members, it also allows managers to access the knowledge of front-line organizational members to help redesign how the organization works. Management and staff experts may not have that knowledge. Of course, management and staff experts also bring knowledge that other members do not have. Even though having management and members working together will result in a better vision and a more effective organization, historically such consultation and partnership has not happened as often as you might think. Why? First, managers often believe that empowering others dilutes their own power, even though sharing control can actually empower both parties.[41] Second, in the past organizations were smaller and technologies less complex, so that members did not have as much unique valuable information to contribute, and the extra time that was required to access this knowledge was deemed inefficient. Third, managers expect members to be unlikely to suggest changes to enhance the financial well-being of owners that might threaten members' self-interests.

Over the years, many things have changed. Today members have important knowledge to bring to the table, and they are motivated to create visions and organization designs that help to improve socio-ecological well-being. TBL management recognizes that members and owners both want their organization to become a better place, and in return members have less reason to fear that management will take advantage of them. When a crisis or opportunity is recognized, members have a standing invitation to help develop a win-win solution. By being informed and involved in the change process, members are more likely to accept even those changes that may not be in their own material self-interests, but do enhance overall economic and socio-ecological well-being.

SET management and preparing for change

SET management not only shares TBL management's involvement of members in developing the vision for the change, but goes one step further to also invite external stakeholders to identity needs and opportunities for change, and also to develop a vision for change. More importantly, SET management differs from the other two approaches because of its ongoing relative emphasis on inviting members to carry out hands-on experiments that address the needs established in phase #1. This is consistent with SET management's emphasis on experimentation described in chapter 11, and even extends it to issues that may question an organization's mission or vision. For SET management, such experimentation refers to practical actions, that is, actual changes that address the problem. The approach has aspects of a "trial and error" method of decision-making (see Chapter 7), where members know that they will not be penalized if their actions fail to solve the problem.

SET experiments differ from the experiments in FBL and TBL management in several significant ways. First, FBL and TBL approaches tend to emphasize "thought experiments," where employees are asked to envision the future, or to imagine what their jobs will be like after a specific change has been implemented. In contrast, SET experiments involve hands-on, practical activities. Second, even when FBL and TBL management do introduce hands-on experiments—for example, introducing pilot projects and creating "small wins" prior to phase #3, as was evident at Interface already in phase #1—they are not as likely as SET management to have members themselves design and carry out the experiments, or to allow members to opt out of certain experiments.

To illustrate the SET approach, consider the example of Robert Greenleaf, a corporate vice president at AT&T, who became aware that women were under-represented among the work crews who installed telephone lines.[42] When he met with the operations managers to draw their attention to this issue (phase #1), Greenleaf very consciously adopted a "we" attitude, deliberately reminding himself that he was part of the culture and organizational practices that were associated with this problem. Then he asked the operations managers to help identify the problematic behavior in light of the "potential biases within 'our' embedded tradition system." In effect, he was pressing the "pause" button, and asking members to evaluate and critically reflect upon why women were under-represented in their workforce. Some operations managers responded by saying that a major reason might be because workers had to regularly lift 50-pound rolls of telephone cable, which they felt were too heavy for most women to lift on a sustained basis. Someone suggested having their supplier provide 25-pound rolls. Greenleaf said that he would be happy to use his authority to have the supplier provide 25-pound rolls for any operations managers who wanted to experiment with that idea (some managers were adamantly opposed). The experiment showed that women were fine with regularly lifting 25 pounds, and that the men preferred it too! This resulted in managers thinking differently about their work (phase #3), and soon this change was made voluntarily throughout the company (phase #4). Greenleaf used a similar approach to increase the number of minorities in management positions at AT&T. In these cases the change may not have been from one organization design to another, but it may have set the course for an organization or a department moving from FBL to SET management. Of course, in some cases these sorts of SET experiments may fail, but in all cases people can learn something by critically reflecting on their experience.

Change is more likely after new knowledge is acted upon with a simple experiment, rather than when knowledge is merely learned cognitively.

SET's focus on practical action is consistent with the Aristotelian idea of **praxis**, *which suggests that positive change is facilitated by a combination of critical reflection and practical action*.[43] Critical reflection ensures that members are engaged and thinking about their firm's positive and negative externalities, while practical action increases the likelihood that members will change their views about how their organization should work. The merits of praxis are illustrated by research that shows that, even though many people recognize the need to make changes in order to combat climate change, this knowledge on its own does not change their worldview or behavior. However, people do change their worldview (e.g., become more ecologically-minded, less materialistic, and less individualistic) after doing and reflecting upon a one-week "experiment with sustainability" (e.g., not using fossil fuels, not eating meat).[44]

PHASE #3: MAKE THE CHANGE

This is the phase where the key changes are implemented. For incremental changes—which do not need nearly as much effort in navigating phases #1 and #2—the changes serve to fine-tune an organization's structure, technology, strategy, and so on. For transformational changes, the changes include these elements as well as changing the idea of the how they fit together to make a sensible whole.

This may be the phase where the role of managers is the most visible. Although change agents are important throughout all four phases of change, during this phase it is critical that change agents model appropriate behavior and provide visible support for the initiative. A **change agent** *is someone who acts as a catalyst and takes leadership and responsibility for managing part of the change process*. Change agents are often managers or human resource specialists from within the organization. Sometimes a change agent may be an outside consultant. Change agents make things happen, and a part of every manager's job is to act as a change agent in the work setting (see the "entrepreneur role" from Mintzberg's study in Chapter 1).

This may be the phase where the role of managers is the most visible.

Change agents sometimes work in conjunction with idea champions. An **idea champion** *is a person who actively and enthusiastically supports new ideas*. Together, change agents and idea champions promote change within the organization by building support, overcoming resistance, and ensuring that innovations are implemented. For example, as a middle manager in a multinational auto parts supplier, Mike McDaniel took it upon himself to promote his organization's continuous improvement initiatives by being one of the first managers to implement participative methods of problem solving in his department.[45] His early adoption served as an example for others to follow. The roles of change agents and idea champions differ for FBL, TBL and SET approaches.

FBL management and making the change

Even if phases #1 and #2 have been completed successfully, the change process can still fail in phase #3. It is not enough for managers to develop a technically brilliant vision for a change. Managers also need human relations skills to ensure members implementd the changes. When change attempts fail, 80% of the time members attribute it to managers having inadequate communication skills and practices, poor work relationships, and poor interpersonal skills.[46] This leaves members uncertain and stressed, and fails to provide access to the rich informal knowledge and communication potential that exists in an organization. Other important factors that contribute to failed change attempts include managers failing to set clear goals, breakdowns in delegating authority to others, and an inability to break old habits (each mentioned about 60% of the time).

80% of failed change attempts are attributed to managers' lacking adequate communication skills and practices, poor work relationships, and poor inter-personal skills.

The FBL managers' primary goal in this stage is to use their authority to ensure that organizational members understand the technical aspects of a change, have the knowledge to implement it, and are committed to implementing it. While it may be relatively easy to *convey* the technical aspects of a change, it can be challenging to *achieve* commitment.[47]

FBL managers can do three things to increase members' commitment to change. First, in order to increase members' confidence in their managers, managers should establish their own credibility, possess appropriate skills, lead by example, be well-prepared, and not overreact to drawbacks.[48] Second, in order to increase members' self-confidence in their own abilities, managers should clarify expectations, provide training,[49] plan for early success,[50] and provide necessary resources.[51] Third, in order to encourage members to have a positive attitude about the change, managers should communicate the intrinsic benefits of the change (e.g., it might enhance job security),[52] link it to extrinsic rewards such as pay raises and bonuses, and hire and promote members who have a positive attitude toward the change. [53]

TBL management and making the change

Unlike FBL managers, who typically rely on their hierarchical authority to develop a change and describe how it is to be implemented, TBL managers couple their authority with continued fostering of participation in this phase of implementing the change. They do this by providing forums for open discussion, and by providing resources and recognition for change agents and idea champions.[54]

From a TBL perspective, managers can do three key things to improve members' commitment to change. First, in order to increase members' confidence in the manager, the manager should foster participation and be trustworthy (including demonstrating a willingness to put members' well-being ahead of the manager's own personal interests).[55] When managers share power, members are more likely to commit to change because of greater confidence that the manager is doing what is best for the organization.[56] In addition, enhancing participation and teamwork contributes to personal satisfaction as well as improving productivity and performance.[57]

Second, in order to increase members' self-confidence in their own ability, managers should foster opportunities for informal and peer learning. Like FBL management, the TBL approach also recognizes the benefit of training and clear expectations in building confidence. However, compared to FBL managers, TBL managers are more likely to create spaces or opportunities for informal or peer learning to enhance the skills of employees and to provide relevant information. Instead of tightly controlling and delivering training and information, TBL managers create and nurture an environment where people can learn from each other. This does not mean that managers leave communication and change to chance. TBL managers are aware of their role in helping others make sense of what is happening in the organization as change brings about intended and unintended outcomes.[58] That is, managers must be able to pick up on issues that have the potential to discourage or create dissension throughout the organization.

Third, in order to encourage members to have a positive attitude toward change, managers should encourage communication about the benefits (and sacrifices) of the change, as will happen when working through the above.

SET management and making the change

The skills and behaviors associated with FBL and especially TBL management are relevant for the SET approach, but SET management is significantly different from FBL and TBL approaches in this third stage of the change process. Whereas FBL and TBL management focus on implementing the desired technical change, for SET management the key change is in the worldview through which members understand and think about their jobs and about how their organization works. In particular, SET management emphasizes changes in members' worldviews that occur because of their praxis experiments that were started in the second phase of the change process. The key change is for members to see their work-world differently, to interpret their jobs through a new lens, and to re-label the components of their work. Of course, the changes in the content of the experiments is also important, as they represent how the elements in an organization are being rearranged in a tangible way. But it is the change in seeing the organization and its elements differently that is key for SET management. In the example of Robert Greenleaf at AT&T, change happened when operations managers started to see women as legitimate hires, that women could do the job as well as men, and that everyone felt better about their organization when women were treated as equals. This was not a compromised worldview that members reluctantly accepted; instead, this had become a new worldview that members were excited to have developed via praxis. Because of this changed worldview, the organizational change was more likely to be safeguarded going forward (phase #4).

Another difference is that SET management is more likely to involve external stakeholders in the change process. For example, Greenleaf essentially gave women a voice at the hiring table, even though in his case none of these women were actually physically present. Some organizations purposely add an empty chair to their meetings to represent stakeholders who are not in the room (e.g., a senior's residence might have an empty chair at board meetings that represents its residents; the empty chair might represent future generations as in Interface; the empty chair might represent Mother Nature). Sometimes involving a wider variety stakeholders may lead in unexpected directions, or perhaps even yield counter-intuitive corporate decisions. Such participation deepens participants' understanding of existing relationships and systems because it draws on the experience and knowledge of a wide variety of stakeholders. This broad participation also informs the implementation of changes so that changes more fully take into account the complexity of the system.

PHASE #4: SAFEGUARD THE CHANGE

Once a change has been implement, steps must be taken to ensure that the change is reinforced (i.e., becomes institutionalized), and that organizational practices do not revert to previous ways. Ideally, the change becomes second-nature to members because it is embedded in their everyday actions and thoughts. This involves creating structures that reinforce the change, and also dismantling structures and systems that undermine it.

FBL management and safeguarding the change

In this phase, called *refreezing*, FBL managers use a fairly top-down approach and adjust various aspects of the organization to reinforce the change implemented in phase #3. This may involve making structural changes in the fundamentals of how work is organized (e.g., standardization, specialization, and centralization) and in who reports to whom (departmentalization). It also requires revising formal job descriptions, aligning the performance appraisal and reward systems with the new expectations, and adapting recruitment and promotion practices to reinforce the new culture. The idea is to refreeze the organization's structures and systems so that the new ways of doing things are repeated and rewarded.[59]

TBL management and safeguarding the change

TBL managers also seek to ensure that positive changes remain implemented throughout the organization.[60] But unlike FBL managers, who seek to re-*freeze* the changed organization via formal structures and systems, TBL managers are more likely to want to re-*slush* the organization because, like SET, they expect some ongoing experimentation within the organization to keep it changing. Thus, TBL managers make changes to the structures and systems (such as adjusting misaligned reward systems), but they place greater emphasis on changes that facilitate learning and flexibility. An important part of

TBL management is that ongoing member-initiated improvements are acknowledged, celebrated, and diffused throughout the organization as appropriate. "Slushing" also assumes that a change may not work uniformly well throughout the organization.

There are important differences in refreezing, *versus* re-slushing, *versus* resuming *organizational activities.*

SET management and safeguarding the change

The final stage for SET management is called *resuming*, which goes even further than the TBL's emphasis on re-slushing. SET management expects and encourages its members to maintain dynamic relationships between organization design elements and various stakeholders. Returning to the metaphor of a movie, once the pause button has been pressed (phase #1), the cast and directors have had a chance to experiment with new things (phase #2) and reflect on them in a way that changes their worldview (phase #3), everything is ready to press the "play" button and let the action continue. In this metaphor, the movie directors place greater emphasis on improvisation than on rehearsing prescribed lines and repeatedly shooting the same scene to get it exactly as written in the script. For example, recall that employees at Semco do not even keep minutes during their meetings, because they want members to remain flexible going forward. SET management encourages flexible structures that can support continuous change. This includes monitoring the outcomes of ongoing experimental changes and providing opportunities to share these successes with others in order to promote further learning. Positive changes are celebrated and disseminated to provide examples for others to consider and adopt (such as when all the units in AT&T started using 25-pound rolls of cable). Ultimately, changes that begin and grow informally may become institutionalized (e.g., the social norm at Semco is not to take minutes; AT&T uses 25-pound rolls), but the process is bottom-up (not decided top-down by management).

INTRAPRENEURSHIP IMPLICATIONS

In each chapter we have considered how the tools and ideas introduced apply to entrepreneurs, and we have primarily focused on classic entrepreneurs (i.e., those starting a new organization). However, the issues of organizational change discussed here are not as relevant to the concerns of an entrepreneurial *start-up*. While many (perhaps most) elements will be changing and dynamic in a new organization, those changes usually will not generate the same level of resistance as discussed in this chapter because in a start-up, nothing has yet been institutionalized. In a new organization, there are few routines and little history; there are no "old ways" to hold on to, and current practice may have been developed literally yesterday. Dynamism is taken for granted in a start-up, so often provokes less resistance.

However, the sorts of change discussed in this chapter, especially planned, transformational and innovative changes, are of considerable importance to intrapreneurs (those who pursue entrepreneurship within an existing organization). In this section we therefore consider how the tools from this and previous chapters can be integrated with the four phases of the change process to help intrapreneurs introduce new ventures within existing organizations.

PHASE #1: RECOGNIZE THE NEED/OPPORTUNITY FOR CHANGE

Intrapreneurial initiatives are often instances of proactive, innovative and transformational organizational change. Thus, the first step in the change process is akin to the first step in the entrepreneurial process, except in the latter it is to identify an intrapreneurial opportunity. A key difference, though, is that an intrapreneur has access to a host of existing organizational resources to start a new venture, whereas the classic entrepreneur is more of a blank slate. This provides significant advantages to intrapreneurs (e.g., access to funds and expertise), and also added challenges (need to change what an existing organization does).

The kinds of intrapreneurial opportunities intrapreneurs identify will vary by management type. FBL intrapreneurs are likely to focus on opportunities where they can leverage existing resources to increase financial returns (e.g., by outsourcing manufacturing to lower cost overseas factories). TBL intrapreneurs will look for opportunities where they can leverage existing resources to address social or ecological issues (e.g., by finding ways to profitably offer their products in low-income countries, to permit people at the Base of the Pyramid to participate in and enjoy the fruits of belonging to a global economy). SET entrepreneurs may seek to change fundamental ways an organization produces its goods and services (e.g., Ray Anderson acted like an intrapreneur when recognized the need for Interface to transform its ecologically irresponsible practices).

Regardless of whether they have an FBL, TBL or SET approach, once intrapreneurs have identified an intrapreneurial opportunity for change, they can use the same strategic management tools used by other managers within their organization (and used by classic entrepreneurs). This includes developing stakeholder maps, performing SWOT analyses, identifying an appropriate generic strategy, and crafting a vision and/or mission statement for the initiative, whether this is driven by the intrapreneur working independently (FBL approach) or with members (TBL approach) or a range of stakeholders (SET approach). Having a clear and compelling value proposition for the intrapreneurial change will increase access to organizational resources and reduce resistance.

PHASE #2: PREPARE FOR CHANGE

Unlike classic entrepreneurs, who focus only on making preparations for their new start-up, intrapreneurs must in addition prepare their host organization for the intrapreneurial initiative. As described in the chapter, the process of preparing for change will differ for FBL, TBL and SET entrepreneurs.

In particular, because intrapreneurs are working within an existing organization, they must consider an issue that most classic entrepreneurs do not have to deal with. **Market cannibalization** *refers to the negative effect that a new product or service has on an organization's existing products and services*. For example, imagine that an airline company launches a new discount subsidiary offering flights with fewer services, in smaller planes at cheaper prices. In this situation, it is likely that some travelers who would otherwise have chosen the main airline will instead choose a discount fare. This loss of a full-fare customer would represent cannibalization, and is an issue that intrapreneurs need to consider. Cannibalization is most common in mature industries that are not growing, because there are few truly new customers. Some organizations practice intentional cannibalization (e.g., manufacturers wanting consumers to upgrade their phones or computers to the latest model), but the possibility for loss makes it essential that the intrapreneur conduct a thorough analysis of the environment and industry, as well as considering the place of the new venture in the organization's overall corporate strategy.

Unless they are envisioning the creation of brand new product categories (e.g., the market for smart phones), FBL intrapreneurs will be most concerned about negative effects from cannibalization, as the FBL model generally assumes a relatively fixed market filled with self-serving and price-conscious customers. Any new product or service must be carefully assessed for its potential to reduce financial returns.

In contrast, some amount of cannibalization is likely to be built into TBL intrapreneurship; it may even be the goal. New TBL initiatives typically involve changing an old product or process to increase profits by being more sustainable. As such, if the new product is more profitable or offers more benefits in terms of public image and brand loyalty, the TBL organization would prefer to have their customers switch to it.

SET intrapreneurs will usually be least concerned about cannibalization. Indeed, few SET markets are mature, because the socio-ecological problems are large and complex; there is almost always room for growth. Likewise, since the SET approach is less focused on maximizing financial profit, having customers change from one product to another is less problematic, as long as the organization remains viable and/or the socio-ecological well-being is enhanced. Indeed, many SET organizations would love to become obsolete. For example, Mohammad Yunus, founder of the Grameen Bank, is known for saying that our grandchildren will need to go to a museum to see poverty (see the opening case in Chapter 6).

PHASE #3: MAKE THE CHANGE

Both when preparing for and when implementing their initiative, intrapreneurs need to be particularly attuned to issues related to organizational (re)design. Whereas classic entrepreneurs struggle with the work required to start-up a fully-developed organization design, intrapreneurs must find their place within an existing organization design. If the intrapreneurial initiative is to succeed, it will likely need to make changes to the host organization's culture and structure.

In particular, when working within host organizations that have relatively rigid organizational designs—which often characterize the mature existing organizations that can best afford to support an intrapreneurial venture and may have the most to gain by its infusion of new ideas—intrapreneurs will be pushing for more fluidity and room to experiment. However, when working within host organizations that have more dynamic organization designs—where experimentation and ideas for potential new initiatives are commonplace—intrapreneurs may be pushing for greater rigidity as they promote a specific idea that they want organizational resources to be focused on. This sort of reversal, which challenges the overall management approach, is part of the reason that the manager's role in a change is often the most visible in Phase #3. It is at this point that the intrapreneur must actively redirect the organization to move in a new direction.

PHASE #4: SAFEGUARD THE CHANGE

Having implemented their intrapreneurial initiative, intrapreneurs must ensure that it becomes institutionalized so that practices do not revert to the way they were done before. If the intrapreneurial initiative was transformational in scope, then the whole organization design may need to be adjusted. But even if the initiative was smaller (e.g., launching a new product or changing how an internal process operates), the change still needs to be integrated with established procedures. Think of the number of people you know who have made New Year's Resolutions or other promises to change their behavior (e.g., lose weight, stop smoking, sleep more), but then a few weeks or months later their behavior is back to normal. Similar processes are at work in organizations, which is why Phase #4 is so important.

Unlike classic serial entrepreneurs, who are often most adept at the start-up phase but not particularly comfortable in developing and managing the ongoing structures and systems associated with mature and stable organizations, intrapreneurs are often more at home in developing the structures and systems required to safeguard the intrapreneurial venture. Intrapreneurs are relatively comfortable in this phase because it involves a return to "normal," where normal means being part of an organization with well-developed information systems, business functions, and so on (Chapter 19). For those intrapreneurs who have successfully implemented their initiative within a fairly rigidly structured host organization, this may mean allowing the intrapreneurial venture to become more rigid over time. And for intrapreneurs who have successfully implemented their initiative within a host organization with a dynamic design, this may mean allowing the intrapreneurial venture to also become more dynamic over time.

CHAPTER SUMMARY

1. Organizational change is complex and varies in its scope (transformational versus incremental change), preparedness (proactive versus reactive change), and source (innovative versus imitative change).

2. The change process has four phases:

   i) recognize the need/opportunity for change

   ii) prepare for change

   iii) make the change

   iv) safeguard the change

3. The four phases in the change process are managed differently in FBL, TBL, and SET approaches:

   a) FBL management has a top-down, productivity-maximizing financial focus where managers:

      i) recognize the need/opportunity for change and develop the change vision.

      ii) use influence tactics to overcome resistance and persuade members to buy into the change.

      iii) use their authority to implement the change and gain commitment.

      iv) establish structures and systems to ensure the change remains entrenched.

b) TBL management has a bottom-up triple-bottom line bias where managers:

   i) sensitize members to a wider scope of areas where change may be appropriate (i.e., not just changes that enhance financial well-being).

   ii) involve members when developing the change vision.

   iii) work together with members to implement change and gain commitment.

   iv) encourage ongoing learning among members.

c) SET management has a bottom-up socio-ecological well-being bias where managers:

   i) press the "pause" button at times when heightened critical reflection is called for.

   ii) invite members to design and do experiments to address a problem/opportunity.

   iii) facilitate the ability and opportunity for members to change their worldview as they reflect upon their experiments.

   iv) encourage ongoing adaptive improvisation and learning among members.

4. The four-phase change process provides concepts and tools helpful to manage the intrapreneurial process.

Questions for Reflection and Discussion

1. Identify the four steps in the change process. What are the main differences between FBL, TBL, and SET approaches in each step?

2. As an employee, which management approach—FBL, TBL, or SET—would you prefer to be in place when your organization is going through a change? If you were a manager, which approach would you prefer? Explain your reasoning.

3. Think of an organization where you have worked. Which management approach to change—FBL, TBL, or SET—do you think would be the most effective in that organization? Think of a change that was introduced in this organization. What system was used? Was that system the one you think they should have used? Why or why not?

4. Think of a change that has occurred in your life recently. How did you react to the change? Is the way you reacted similar to the way you react to change generally? Why or why not? What are things that make you more (and less) open to change?

5. From your personal experience, what do you think are the three most important reasons that people resist change? What can be done to minimize resistance and increase commitment? How do your ideas square with what is found in the text on this subject?

6. What are the benefits and drawbacks of including more stakeholders in shaping and implementing the change process?

7. In previous chapters you have been developing an Entrepreneurial Start-Up Plan for an organization that you would like to create. You have probably been thinking of your organization as a new start-up, but how might it be possible to realize your value proposition within an existing organization via intraprenuership? Identify a specific organization that you think would be well-suited to pursue your idea intrapreneurially. What do you think makes it suitable? What changes would the existing organization be required to make? What would need to be done to manage that process? Sketch out an intrapreneurial plan for achieving your Entrepreneurial Start-Up Plan (ESUP) goals within the existing organization you have identified.

Space to Write Down Your Reflections & Notes

Preview and Summary of Chapter 19

	FBL	TBL	SET
Four steps: 1. Establish performance standards	Value chains help to identify key control points and standards	Generally speaking, the TBL approach tends to follow FBL practices, except for those specific situations where SET practices help to enhance the organization's financial well-being	Value loops help to identify key performance standards
2. Monitor performance	Use top-down information systems that measure things to maximize productivity, efficiency and financial outcomes		Bottom-up information systems help to enhance measures associated with socio-ecological well-being processes and outcomes
3. Evaluate performance	Use top-down approach - rational		Multiple stakeholders - relational
4. Respond accordingly	Managers take action		Managers expect help from others
Business functions:			
Human resource management	Focus on individual KSAOs that increase financial well-being		Develop group KSAOs that enhance overall well-being
Finance	Align managers' interests with owners		Align managers' interests with all stakeholders
Accounting	Focus on short-term and monetary measure		Focus on long-term and multiple measures
Operations/ Supply	Structure relationships to enhance efficiency		Seek relationships for socio-ecological well-being
Marketing	Focus on customer wants and price		Focus on customer needs and externalities
Entrepreneurship	Start-ups need the same control systems as any other organizations, but may face constraints due to founder effects and scaling issues		

CHAPTER 19:
CONTROL

Learning goals

After reading this chapter, you should be able to:

1. Describe the importance of the controlling function of management.

2. Identify and describe the four-step process of organizational control.

3. Explain how the control process varies in FBL, TBL, and SET management.

4. Understand the difference between a value chain and a value loop.

5. Explain the difference between data and information, and why this is key to controlling.

6. Understand why the control process is important in the various functional areas of an organization.

7. Describe how the functional areas of business differ in FBL, TBL and SET organizations.

8. Explain how founder effects and scaling influence entrepreneurs' use of the control process.

LIKE FATHER, UNLIKE SON[1]

Michael Mauws was completing a graduate degree in business when his father, Larry, asked him to manage his company, Westward Industries Ltd. The company designed and manufactured three-wheeled cars used by police forces throughout the U.S. for traffic control and parking enforcement. Its three-wheeled "Go-4" vehicle had taken the market by storm and had become a leader in its market segment.

Larry wanted Michael to take over the firm so that Larry could focus on his favorite part of the business, which was redesigning the car and inventing new products.

Michael agreed to help his father, and had visions of making the company a "self-managed organization" where workers had as much control as possible.

Michael knew that he and his father had different visions for how Westward should be managed. Larry was an entrepreneur who liked to invent things, but he did not like paperwork. He was always tinkering with the car, improving it because he enjoyed responding to customer feedback. For him, the best way to grow Westward was by improving the design of its product. It was his company, his car, and he called the shots. There were few written policies, and a very limited paper trail. Inventory and parts were especially problematic, and often the assembly line had to wait for a rush-order of missing parts.

Westward's employees were happy that the firm was going to be managed by someone with Michael's administrative and organizational skills, and glad that Larry would stay on as Vice-President of Research and Design. Michael's management style was the opposite of his father's. Rather than top-down control, Michael wanted the firm to have bottom-up control where members had control over their work. Michael wanted to be treated like a member of the "team," a team where everyone in the organization did their part and respected each other. Michael wanted everyone to have ownership of their jobs and to enjoy their work. He also wanted everyone to be empowered to make decisions about their jobs, including what time they arrived in the morning and when they left at the end of their shift. After all, they were the experts in the work that they did. Michael created a "What's Happening" binder that he left on the staffroom table; it contained letters to suppliers, customers, and financial reports. He wanted everyone to know what was going on.[2] Michael started to hold weekly staff meetings, where problems were discussed and decisions made.

Michael's most important contribution was to overhaul the management information systems at Westward. He revamped everything from human resource management to accounting to operations management. He knew that getting the right information into the hands of employees was key to his vision of a self-managing organization. His new systems provided basic information that had not been available at Westward before—like how many parts there were in inventory—and this was welcomed by everyone. At first Larry despised the system, because it demanded that everyone—even Larry—had to account for each part and piece of material being used. Michael also overhauled the accounting system, which made it easier to find out which custom orders were more profitable, the costs associated with adding special features to the vehicle, and which components to produce in-house and which to get from suppliers.

Compared to his entrepreneurial father, Michael had a different set of values and ideas about control, and a different way of relating to others and of making decisions. This, in turn, resulted in him developing different information systems.

However, even six months after his arrival and making all these changes, most employees at Westward had not embraced Michael's management approach. They had spent years working under Larry's approach, and most did not buy into his son's vision for a "self-managed organization."

Then unexpectedly Michael left Westward and Larry took over the management duties again. Although Larry appreciated the systems improvements that Michael had made, Larry was quick to revert to the "old school" approach to managing the company. And employees, who were very familiar with Larry's management style, were ready to embrace it. Michael's vision for a self-managed firm and his changes seemed destined to fail.

However, the story does not end there. One year **after** his departure, Michael's idea of a "self-managed organization" had actually started to take hold at Westward. This happened in large part because of the way that Michael had designed Westward's management information systems, which Larry had not changed after Michael's departure. By working in accordance with these information systems—which Michael had designed to support his vision of a self-managed organization—workers at Westward began to experience firsthand what Michael had been trying to accomplish. They grew to enjoy the empowerment that the information systems provided.

Gradually employees began to challenge Larry, in large part because Michael's systems provided them with information to make better decisions than Larry could make. For example, ordering supplies and parts was no longer based on Larry's guesstimates, but rather on the more accurate information provided by Michael's information systems. In sum, the information systems that Michael had developed and implemented were shaping a self-managed organization, where control that had formerly been held by the manager was now available to workers.

Controlling *means ensuring that actions of organizational members are consistent with the organization's underpinning values and standards.* Controlling is usually taught as the fourth function of management (after planning, organizing, and leading). However, at its best, controlling represents the most thoughtful, reflective, and forward-looking of the four functions of management, and could easily be taught before the other management functions. Controlling demands that managers consider the big picture of an organization's operations, and ensure that all the different activities in an organization accomplish what they have set out to do.

We begin in this chapter by describing the four-step control process, highlighting the important difference between value chains and value loops, the difference between data and information, and the differences between the Financial Bottom Line (FBL), Triple Bottom Line (TBL), and Social and Ecological Thought (SET) approaches to controlling. We then describe how business functions like marketing, production, and finance fit into the controlling process, and how these functions operate differently in FBL, TBL, and SET organizations. We conclude with a discussion of the implications for entrepreneurship.

FOUR STEPS IN THE CONTROL PROCESS

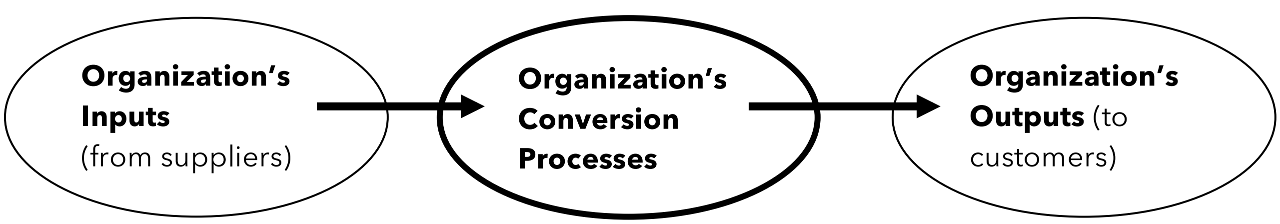
The four steps of the controlling process are: establish performance standards, monitor performance, evaluate performance, and respond accordingly.

STEP #1: ESTABLISH PERFORMANCE STANDARDS

Because managers cannot control everything that happens in an organization, they must be selective when they design control systems. In the first step of the control process, managers identify the most important activities that need to be controlled. By doing this, managers can identify and establish a shorter list of *key* performance standards that must be met.[3] These goals and standards must fit with the overall organizational mission, vision, and strategy (see Chapter 8).

As shown in Figure 19.1, it is useful to think of three dimensions of organizational activities that managers must control. Inputs (hiring employees, financial resources, access to supplies, etc.) are resources that must be effectively combined (in a conversion process) in order to produce goods and services (outputs) for specific markets that the organization has targeted. This three-step **value chain**–*the sequence of activities needed to convert an organization's inputs into outputs*—is a crucial tool that helps managers identify and establish key performance standards. Value chains help managers design control systems that minimize the costs associated with waste,[4] over-production, waiting, transportation, inventory, and defects.[5]

Figure 19.1: A conventional value chain



Managers use three types of controls, which correspond to the three basic parts of the value chain: feedforward, concurrent, and feedback controls. Managers need to first determine the nature of the inputs required in order for their organization to create its goods and services. *Feedforward controls* are designed to reduce organizational problems before they occur by anticipating them and preventing them. For example, managers ensure the people they hire have proper training and experience, that the financing they acquire is affordable and legitimate, and that the raw materials come from trustworthy suppliers and are available in a timely manner. *Concurrent controls* point to the most important information about an organization's conversion processes, and help managers to identify and correct problems as they occur. This includes things like developing standard operating procedures detailed job descriptions, and quality control.[6] *Feedback controls* are designed to identify and correct problems after they occur so as to avoid future problems. This might include performing exit interviews with employees who leave the firm, ensuring the return rate on financial investments meets targets, and monitoring sales for trends and surprises.

The FBL approach to establishing performance standards

FBL management emphasizes controls that can be quantified and written down. These standards may be expressed in terms of standard operating procedures, specifications for input components, piece-rate pay systems, and the constraints and targets built into departmental budgets.[7] Table 19.1 describes four well-known generic performance standards that are popular in a wide variety of FBL organizations.

Table 19.1: FBL performance standards

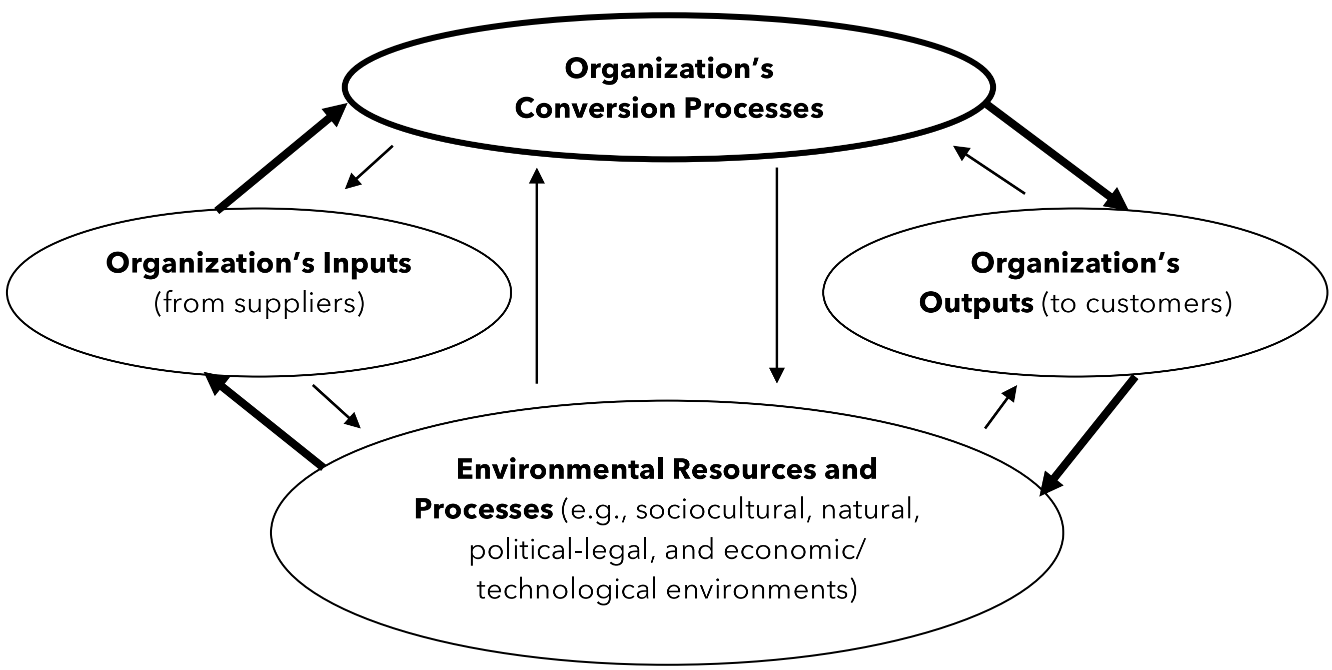
Performance standard	Measures
Factor productivity: How well is the organization performing, all things considered? How well does the organization perform with regard to specific inputs (such as labor)?	Total factor productivity = value of outputs ÷ (value of the inputs of labor+capital+materials+energy) Labor productivity = value of outputs ÷ value of direct labor
Liquidity ratios: Is the organization able to quickly convert assets to cash if it needs to meet short-term obligations? If for some reason the organization doesn't sell its inventory, will it still be able to meet its short-term obligations?	Current ratio = current assets ÷ current liabilities Quick ratio = (current assets – inventory) ÷ current liabilities
Leverage ratios: Is the organization's financing mainly from borrowed money or from owners' investments? Is the organization technically insolvent (that is, are its debts greater than its assets)?	Debt-to-assets ratio = total debt ÷ total assets Times-interest-earned ratio = profits before interest and taxes ÷ total charges for interest
Profitability ratios: How well is the organization using its resources to generate profits? How much profit does it make on each dollar of sales?	Net profit = net income ÷ sales Return on investments (ROI = net after tax profit ÷ total assets

The TBL approach to establishing performance standards

TBL managers also use the four performance standards described above but, as depicted in Figure 19.2, in situations where it is in their financial interests they add a link between an organization's outputs and its inputs, which is consistent with an emphasis on reducing negative externalities. In other words, TBL organizations (and SET organizations) emphasize value *loops* instead of value *chains*. A **value loop** *describes how an organization's inputs are converted into outputs, which in turn are linked to the organization's future inputs.* For SET and TBL management, the FBL idea of a value chain has two key drawbacks. First, it ignores socio-ecological externalities. The "Environmental Resources and Processes" element at the bottom of Figure 19.2 helps managers to understand how organizational activities contribute to, and resolve, societal and ecological problems in the larger system. Value loops draw attention to externalities associated with both inputs and outputs.

A value loop *describes how an organization's inputs are converted into outputs, which in turn are linked to the organization's future inputs.*

Figure 19.2: A generic value loop



Second, value chains move in only one direction: inputs→conversion→outputs,[8] whereas value loops explicitly recognize that the flow of resources travels in *both* directions between the links. The thicker arrows in Figure 19.2 indicate the direction that managers usually see the resources flowing, while the thinner arrows indicate that managers must also be sensitive to how resources and information flow in the opposite direction. These "opposite direction" flows affect the control process. For example, when managers in fast food restaurants began to receive requests for food prepared in a healthier fashion (i.e., grilled not fried, fruit instead of fries), that affected the companies' conversion processes. Customer inquiries regarding the environmental impact of packaging influenced managers' input decisions (such as looking for suppliers who used recycled paper). Managers have much to gain by developing control systems that adapt to changes in customer preferences or trends in the larger environment.

Consider how value loops are used at Interface Inc., the carpet manufacturer described in the opening case of chapter 14 that went from being a FBL to a TBL and eventually to a SET managed company.[9] In terms of the socio-cultural environment, managers at Interface recognize that societal values shape their employees and provide the legitimacy that allows the company to do its work. At the same time, Interface contributes to the socio-cultural environment by creating jobs and products that provide symbolic and social meaning. Interface also affects the socio-cultural environment by providing a compelling example of how SET management principles can be applied in large organizations. In terms of the natural environment, Interface requires raw materials as inputs, and its managers strive to minimize the amount of pollution or waste that is created (unsaleables), and to maximize the re-usability of its outputs (cradle-to-cradle product design). In terms of the political-legal environment, managers at Interface depend on the legal institutions and regulations that allow it to exist as a corporation, and it in turn provides taxes to support the infrastructure created and maintained by government. Finally, in terms of the financial/technological environment, Interface requires investment capital and existing technology, and it pays out dividends and develops more sustainable technologies that create benefits for others.

TBL performance measures are becoming increasingly commonplace, drawing from developments in the balanced scorecard approach, and social and ecological audits.[10] For the most part, this includes measuring social and ecological performance in ways that FBL management has typically avoided, including measuring things like meaningful work, work-life balance, happiness, social justice, and so on. Some existing societal measures that use such an alternative performance approach include the Genuine Progress Index and Gross National Happiness Index.[11] Table 19.2 provides examples of possible TBL and SET performance measures.

TBL performance measures are becoming increasingly commonplace, drawing from developments in the balanced scorecard approach, and social and ecological audits.

Table 19.2: TBL and SET performance standards

Performance standard	Measures
Participation/Inclusion: How involved are stakeholders in making decisions? How much time is allocated to discussing issues in meetings?	Project Group Inclusion = Number of external stakeholders in the group ÷ Total number of group members Socio-Ecological Time allocation = Amount of time spent discussing socio-ecological issues ÷ total time of meeting
Ecological/Financial: How efficient is the organization at transforming ecological resources into economic value?	FinEco ratio = Financial value of outputs ÷ ecological footprint
Ecological well-being: Is the organization creating more waste than it is reducing?	Net ecological externalities = positive ecological externalities minus negative ecological externalities
Social well-being and social justice: What effect has the organization had on marginalized social communities?	Net social externalities = positive social externalities minus negative social externalities Work force composition = Number of employees hired from specified chronically-underemployed groups ÷ Total number of employees hired

The SET approach to establishing performance standards

Whereas FBL and TBL standards place a primary emphasis on maximizing financial interests, efficiency, and achieving competitive advantage, key values and standards for SET management include interpersonal trust, democracy, and the flow of empowering information. These values and performance standards are evident at Semco, perhaps the best-known example of SET control (see the opening case in Chapter 11).[12] If Semco can achieve such SET performance measures, then Ricardo Semler is confident that other goals—like financial viability, meaningful work, motivated employees, and work-life balance—will follow. Even though Semco has few written regulations and performance standards, and does not even have a *written* mission statement, Semler does have a mission: "to find a gratifying way of spending your life doing something you like that is useful and fills a need."[13]

For Semler, measures of productivity and the financial bottom-line are a *means*—obviously a very important means—to this larger *end*.[14] One reason that Semler does not have a formal mission statement is because he wants Semco's mission, and its key values, to be constantly socially-created by the workers and other stakeholders. A desire to allow a variety of stakeholders (owners, members, customers, suppliers, and neighbors) to participate in shaping an organization's "barometers of success" is another hallmark of SET management.[15] As Semler notes, the key is to involve other stakeholders in developing the appropriate measures: "By evaluating success from everyone's point of view, we believe we'll land on the new list of companies that unite sustainability with all-around satisfaction. Let's call this list the Fortunate 500. … Redesigning the workplace for the twenty-first century means letting in fresh air and giving up control."[16]

"By evaluating success from everyone's point of view, we believe we'll land on the new list of companies that unite sustainability with all-around satisfaction. Let's call this list the Fortunate 500."

STEP #2: MONITOR PERFORMANCE

Once managers understand the critical steps in value chains/loops, and have identified the key performance standards to be met, they must develop appropriate information systems that allow them to monitor performance. An organization's **information system** *consists of its mechanisms that identify, collect, organize, and disseminate information.* Information systems are important for each of the four functions of management: planning, organizing, leading and controlling. Information is especially important for decision-making. Spending on information technology accounts for more than half of all the money organizations spend on capital annually (more than $1 trillion).[17] Information systems are important in each phase of the control process, but perhaps most evident in allowing managers to monitor performance.

Conceptually, perhaps the most important thing an information system does is to allow managers to determine what are considered to be valuable information, versus what is considered to be merely data. **Data** *are facts and figures, some of which managers deem to be useful but the majority are not.* Organizations are filled with almost infinite amounts of data, including what clothes people are wearing on a particular day, what they are eating for lunch, how many words are used in email messages, the tone of someone's voice, and so on. Most data are ignored because they are not seen as important enough to pay attention to.

Information *refers to data that have been given meaning and value.* Managers design control and information systems to monitor meaningful data. For FBL and TBL management, meaningful data are those that help to maximize productivity and financial well-being, and thus are deemed information. Data that do not help to achieve these goals are not considered information from a bottom-line perspective. For example, for many years managers at fast food restaurants found that data about the *price* of paper used to wrap their burgers provided useful information (to allow managers to reduce costs and thus increase profits), but these managers did not have any interest in whether or not the paper was recycled. Today, thanks to changes in consumer demand, information about whether the paper has been recycled is recognized as important information along with the price of the paper.

It is precisely this process of giving some data meaning that makes information systems an essential part of the controlling function. In creating an organization's information system, managers are signaling what is meaningful and valued in the organization, and what is not. For example, FBL managers may design information systems that monitor and collect financial data, but they typically pay much less attention to social and ecological well-being.

Regardless of the content of a management information system, there are some generic rules-of-thumb that managers should keep in mind when designing them. Managers should develop information systems that:

1) are based on accurate data

2) encompass all aspects of their organization that they deem meaningful, aware that sometimes the costliness of information will dictate that it is incomplete

3) are timely, in order to provide the necessary feedback to allow people to make better decisions and perform their jobs better

4) are user-friendly and understandable.

Computers are playing an increasingly important role in controlling, something Henri Fayol could not have envisioned a century ago when he first introduced this management function. We live in a time of super-computers and "big data;"[18] managers have an over-whelming amount of digital data available to them, heightening the importance of discerning what subset of those data are deemed valuable information.

The FBL approach to monitoring performance

Compared to SET and TBL approaches, FBL management has the most focused attention on information that helps to maximize productivity, efficiency, and financial well-being; it also has the greatest emphasis on top-down control systems. In particular, FBL management is drawn to the efficiencies associated with digital information systems, which enable and thus often encourage monitoring performance using quantifiable information instead of face-to-face information. Technological advances make it increasingly easy for managers to count (numerically) many different things, and over time the things that can easily be counted begin to count (i.e., to matter). For example, **transaction processing systems** *are used to record customer orders, track purchases from suppliers, and so on.* Most organizations use transaction processing systems to handle tasks like customer billing, payment of suppliers, and payroll preparation and payment.[19] Grocery stores use scanners to record the sale of items and track inventory levels. The information collected with transaction processing systems is often used in **operations information systems,** *where software helps managers to monitor and coordinate the flow of work between various organizational subunits and their suppliers.* Such systems help to identify and overcome potential bottlenecks, shortages in inventory, and over-production. The information drawn from transaction processing systems is also helpful in **decision support systems** *that allow managers to gather and manipulate data from a variety of sources to help evaluate performance.* For example, managers might want to examine past sales data in light of seasonality and the timing of new product introductions by competitors. Such information will let them know how important it is to consider factors like seasonality or competitors' advertising campaigns.

We live in a time of super-computers and "big data," which increases the importance of managers discerning what subset of those data *are deemed to be valuable* information.

Information systems can enhance dynamic real-time relationships with external organizations, such as when managers work with suppliers using tools like **just-in-time** *inventory management, which brings all the needed materials for production together literally just-in-time for them to be combined into the finished product.* A Dell computer factory in Austin, Texas communicates with its suppliers so effectively that the Dell factory keeps just two hours of inventory on hand, thereby minimizing raw materials inventory. Finished computers are loaded onto trucks less than 15 hours after a customer has submitted the order. These controls all help to lower the financial costs that are associated with the high rate of obsolescence in high-tech industries. On average the value of a personal computer decreases by about 1% every week.[20]

The TBL approach to monitoring performance

TBL management is also attracted to the same efficiencies that FBL management is, but TBL approach is more aware than the FBL approach of the need to regard socio-ecological data as information, and uses a less top-down approach in situations where it is profitable to do so. For example, the TBL approach monitors performance in terms of reducing energy costs and possible savings from using renewable energy. TBL management is more aware than FBL management that using information systems to monitor people can lower trust and dehumanize the workplace, creating negative social externalities the undermine productivity. Thus, TBL organizations are less likely to be among the 43% of employers who monitor the amount of time employees spend at the keyboard (including their content and keystrokes), and less likely to use video monitoring to counter theft in the workplace.[21]

The SET approach to monitoring performance

SET management monitors the widest scope of socio-ecological performance, and is most likely to emphasize bottom-up control systems. For example, as we saw in the opening case, the SET approach is most likely to use management information systems to empower workers. Along the same lines, SET management is more likely to be attracted to software like electronic hubs (eHubs) which allow information to be transmitted in real-time among all stakeholders, thereby enabling coordination and mutual adjustment by stakeholders from a variety of organizations. EHubs empower suppliers and customers, allowing each to see how much a firm has paid for its inputs, the costs incurred in the conversion process, and the price at which it sells its outputs.[22] In such cases, managers need to trust their employees, suppliers, and customers to not use the information to harm the firm.

The SET approach is particularly aware that members treat one another more respectfully when there are no monitoring systems.[23] For example, Semco—which places primary emphasis on nurturing trust, dignity, and sharing of information—does not set up structures and systems like internal audits or inspections to monitor whether workers are complying with organizational regulations (though they must comply with governmental regulations). Ricardo Semler believes that information is power, and he does not want to use that power as a form of hierarchical control. Instead, Semco favors a transparent information system where, for example, everyone has access to the company's financial books (including company profits and every employee's salary) which are also open for audit by their unions. This willingness to share information also spills over to Semco's external environment, such as occasions where customers are sometimes told exactly how much profit Semco will earn from a given sale.

Although SET companies like Semco deliberately minimize many aspects of traditional top-down monitoring of performance (e.g., Semco monitors profits and inventories, but does not monitor the performance or hours worked by individual employees), they do use bottom-up performance monitoring systems. Semco employees annually fill-out an anonymous survey about the company, its future, and its managers. Every six months members fill out a "Seen from Below" questionnaire that asks 36 questions, such as whether a manager treats subordinates and peers in the same way.[24]

STEP #3: EVALUATE PERFORMANCE

During this step, managers compare the information collected in the second step to the goals or standards established in the first step. This allows managers to answer questions such as: Have quality standards been met? Is the "liquidity ratio" within the desired range? Are inventory levels acceptable? Has a salesperson's performance improved as planned? During this step, managers must decide whether extenuating circumstances help to explain variations in performance. For example, did a competitor introduce a new product, or go bankrupt? Were there unforeseen shifts in the industry, or in the overall economic picture? Were any employees experiencing health problems that affected their performance?

The FBL approach to evaluating performance

There is a tendency for FBL managers to evaluate the performance of individuals. This is evident in piece-rate compensation systems, where employees are paid based on how many widgets they produce or by how many sales they make, by giving "employee of the month" awards, by paying bonuses for employees who meet certain targets, and so on (see also Chapter 13 on human resource management). The focus is on setting rational and quantifiable SMART goals—Specific, Measurable, Achievable, Results-based, and Time-specific (see Chapter 8)—for each individual in the organization.

The TBL approach to evaluating performance

The performance of individuals is often influenced by systemic factors outside of their control.

TBL management is more likely to be attuned to the growing awareness that the performance of individuals is often influenced by systemic factors outside of their control. Perhaps the best example of this comes from **Total Quality Management (TQM)** *which emphasizes how managers can continuously improve organizational work systems so that products and services better meet the quality desired by customers*.[25] This is illustrated in the "The Red Bead Experiment" that W. Edward Deming,[26] a founding father of the quality movement, often used at his four-day seminars. Ten volunteers are recruited to work in an "organization," including six workers, two inspectors, an inspector of the inspectors, and one recorder. The experimenter then pours 3,000 white beads and 750 red beads into a box, where they are mixed together. Each worker scoops beads out of the box with a scoop that holds 50 beads. Each full scoop is considered a day's production: white beads are acceptable, but red beads are defects. Workers are asked to scoop out only white beads and no red beds. Of course, due to the laws of statistical variability, each worker scoops out some red beads, regardless of how motivated they are to get only white beads or how much their "manager" exhorts them not to or praises workers who had fewer-than-average red beads.

The message is simple. From a statistical point of view, it is foolish for a manager to utilize *data* about the number of red beads any particular worker produces as the only *information* for promoting or demoting workers. Rather, statistically speaking, there will always be variation in any process or system, so there will always be variations in the performance of workers, with some performing well and others performing not as well. Put differently, there will be differences in individual workers' performance because performance is often influenced by systemic factors outside a worker's control. It is therefore up to management to improve the systems, rather than to reward and control the individuals within the system.[27]

TBL management extends the TQM ideas by applying them to even larger systemic feedback loops consistent with TBL performance criteria. The TBL approach evaluates the effect that the organization has on the larger socio-cultural, ecological, political-legal, and economic-technological environments. This is consistent with intelligent product systems that evaluate organizational performance more positively when organizations adopt cradle-to-cradle systems that minimize waste (i.e., unsaleables) (see Chapter 4). The emphasis is on keeping worn-out products out of landfills, and designing them to become valued inputs for future products.

The SET approach to evaluating performance

SET management is similar to TBL management, except that the SET approach relaxes the emphasis on maximizing financial well-being, involves even more stakeholders, and is more likely to consider qualitative evaluations. Compared to FBL management, both SET and TBL management are more likely to involve more stakeholders in evaluating performance, as is evident when an organization's annual report includes social audits prepared by external evaluators, when managers are evaluated by the people who report to them, and when external stakeholders are invited to participate in decision-making processes.

Overall, SET and TBL approaches place greater emphasis on relational and qualitative measures of performance than the rational and quantifiable measures associated with the FBL approach. Recall from Chapter 8 that SET management emphasis SMART2 goals: Significant, Meaningful, Agreed-up, Relevant and Timely. One reason that FBL management is so popular is because it emphasizes rational and objectively measurable goals like productivity and profits, which seem to be comparatively easy to measure in monetary terms. It appears to be more difficult to monitor or evaluate goals like trust, democracy, ecological sustainability, social justice, and so on. However, upon closer inspection the so-called rational financial measures that characterize FBL management may be less objective than people think, or they may measure things that people don't see as important to them. For example, a company's annual report has the appearance of objectivity and reality, but numbers and reports are poor representations of the human, intellectual, social, and spiritual capital that make up an organization. And even a measure as basic and seemingly non-controversial as "profit" can be manipulated, as evident in the case of ICI when top management deliberately changed how it calculated and reported the company's profits in order to show the company's first loss in 100 years. That "loss" was designed to get the attention and support of employees to implement a transformational change that top management thought the company needed.[28]

Upon closer inspection, the so-called rational financial measures that characterize FBL management may be less objective than people think.

STEP 4: RESPOND ACCORDINGLY

Responding accordingly is an on-going activity that can happen at any step in the control process. For example, if input standards are not being met, then it may be time to reconsider suppliers. If the conversion process standards or output standards are not being met, it may mean offering training or professional development to correct the behavior, or transferring staff to other jobs that they are more capable of handling, or dismissing certain employees.

Sometimes responding accordingly may prompt managers to reconsider an organization's entire value chain/cycle, and this would trigger the organizational change process that was described in Chapter 14. As is evident in the opening case of this chapter, it may take a long time before comprehensive changes to an organization's information or control systems result in noticeable changes in members' worldviews or performance. Unfortunately, it is not unusual for managers to become disappointed when their changes do not immediately yield the improvements they had hoped for; this may cause them to become impatient and jump from one fad to another. Expected performance improvement may take three or more years to materialize, and it is therefore important that changes are not implemented on an ad-hoc or piece-meal basis. Thus, to "respond accordingly" may mean that managers have to be patient and ensure that their approach to control is implemented consistently throughout the organization and in all four steps of the control process.[29]

It can take 3 years or longer before changes to an organization's information or control systems result in noticeable improvements in performance, thus managers need to be patient and not jump from one fad to the next.

The FBL approach to responding accordingly

Compared to TBL and SET approaches, FBL managers are more likely to focus narrowly on whether a firm's financial performance standards are being met, and to take a rational, unilateral, top-down approach to responding accordingly. FBL managers like Jack Welch (Chapter 1) are famous for so-called "rank and yank" systems, where employees are ranked from highest to lowest performing, and "responding accordingly" means firing the lowest-performing employees. Similarly, with little regard for socio-ecological consequences, Welch is infamous for shutting down divisions within GE that were profitable but not in the top three leaders of their industries.[30] FBL businesses place greater emphasis on short-term, quarterly, profit reports than TBL or SET businesses.

The TBL approach to responding accordingly

In contrast to the FBL approach, TBL managers place greater focus on sustainable development, and on a relational, multilateral, bottom-up approach to responding accordingly when these enhance an organization's financial well-being.[31] When TBL managers encounter inadequate performance, they are more likely to seek help from others to understand why it occurred and to develop a way to resolve the problem. Rather than assume that problems must be solved from the top-down, TBL managers often take a more relational approach that welcomes bottom-up input. Because TBL managers to treat stakeholders with respect and to foster community when it is profitable to do so, stakeholders often have a greater interest in helping to solve organizational problems.[32]

The SET approach to responding accordingly

SET management places even more emphasis on socio-ecological well-being and on having members respond accordingly when performance standards are not meant.[33] This is consistent with designing information systems that empower the members, as in the opening case at Westward Industries. Ricardo Semler is often asked: "How do you control a system like the one at Semco?" He answers: "I don't. I let the system work for itself."[34] For example, trust was threatened at Semco when equipment theft started to be a problem in the workplace. Adding to the concern was that people agreed that the thief must be a co-worker. Managers deliberately waited for a grass-roots solution to develop. Some employees suggested installing surveillance cameras, while others countered that doing so would undermine the trust that Semco valued so highly. Over time, the problem was resolved without direct managerial action. In fact, the managers never did find out exactly how this particular problem was solved; the thefts just stopped. Because employees in SET organizations have a voice in developing and enforcing the control, and because they understand the trade-offs of different stakeholders' various forms of well-being, they are more likely to seek opportunities to improve the SET control process, rather than to blindly defend their self-interests.

Control, Key Information Systems, and the Business Functions

The control function is supported by and closely related to the information systems embedded in the main functions of business (e.g., human resource management, accounting, finance, supply chain management, operations management, and marketing). Table 19.3 shows how the business functions provide well-established information systems to manage the different parts of the value chain for each of the three main domains of management: people, finances, and other resources/organizations.[35] First, human resource management information systems help managers ensure that organizations are well-staffed (inputs), that members are well-trained and motivated to do their work (conversion process), and adequately paid (output). Second, finance and accounting information systems help managers ensure that organizations are adequately funded (inputs), that finances are used prudently (conversion process), and that firms get adequate returns on their investments (outputs). Third, supply chain management information

The control function is supported by and closely related to the information systems embedded in the main functions of business (e.g., human resource management, accounting, finance, supply chain management, operations management, and marketing).

systems help manage the resources provided by suppliers (input), operations management information systems ensure that the resources are effectively transformed into goods and services (conversion process), and marketing information systems ensure that an organization's goods and services are well-received in the marketplace (outputs). Note that Table 19.3 is relevant for the FBL, TBL, and SET approaches, but that the "value loop" in the lower of the part of the Table applies only to TBL and SET management. Note also that the business functions often go beyond the focus that we describe below (e.g., marketing can also inform an organization's inputs and conversion processes). In the following paragraphs, we provide an overview of each functional area, and describe how it differs for FBL versus TBL versus SET management.

Table 19.3: Three domains and five business functions of the controlling process

Three elements of a value chain / The three domains of management	INPUTS (e.g. acquiring resources) →	CONVERSION PROCESS (e.g., using the resources) →	OUTPUTS (e.g., providing goods and services)
1. Managing people	HUMAN	RESOURCE	MANAGEMENT
2. Managing finances	FINANCE (raising money)	ACCOUNTING	FINANCE (investing money)
3. Managing other resources and organizations	SUPPLY CHAIN MANAGEMENT	OPERATIONS MANAGEMENT	MARKETING

VALUE LOOP
(only for TBL and SET management)

HUMAN RESOURCE MANAGEMENT (HRM)

As described in Chapter 13, HRM information systems help managers to hire members (inputs), train and motivate them (conversion process), and compensate them (outputs).[36] Table 19.4 provides a brief overview of how these three key steps in HRM differ between FBL, TBL, and SET approaches.

Table 19.4: Three approaches to human resource management

	FBL	TBL	SET
Inputs (staffing/ recruitment)	HRM professionals: (a) identify the knowledge, skills, abilities, and other characteristics (KSAO's) that an organization needs, and then (b) recruit members who have the desired KSAO's.	Akin to FBL approach, except when SET practices enhance financial well-being.	SET approach is more likely to develop KSAO's for *teams* (rather than *individuals*) and to gather input from team members and other stakeholders (e.g., customers, other departments in the organization), versus relying on HRM professionals. Also, the SET approach is more likely to recruit members from chronically unemployed groups (e.g., Greyston).
Conversion process (training, development, motivation)	Provide members with appropriate opportunities for job-based training and development.	Akin to FBL approach, unless SET enhances financial well-being.	Provide members with job-based and beyond-job-based training and development (e.g., SET encourages employers to pay for employees' schooling even when it does not develop a specific KSAO for the firm[37]).
Outputs (performance appraisals, compensa-tion)	HRM professionals set up and carry out performance appraisals linked to compensation systems (includes salary and benefits).	Akin to FBL, except when SET practices enhance financial well-being.	Employee performance appraisals are designed to stimulate members' *growth and development*, rather than using them to decide *on pay raises and promotions*. Compensation packages seek to minimize the differences between hierarchical levels (income inequality) and to pay above-industry-level wages for lower paid positions.[38]

FINANCE

The business function of finance creates information related to obtaining the funds an organization requires to operate (inputs), and deciding how those funds should be invested to optimize their returns (outputs). With regard to raising money—the aspect of finance that focuses on the input of money—there are two basic options: debt financing (e.g., a firm borrows money) and equity financing (e.g., a firm sells shares of ownership to investors). The type of financing chosen is determined in part by the firm's short-term and long-term capital needs. With regard to investing money, financial managers look at issues related to risk and return, and the merits of diversification. Table 19.5 presents four axioms of finance from FBL, TBL and SET perspectives.[39]

Table 19.5: Three approaches to the four axioms of finance

Axiom	FBL	TBL	SET
Inputs: The risk-return trade-off	Investors will accept extra financial risk only if there is a higher potential financial payoff.	Akin to FBL, except if SET is also better financially.	Investors will accept additional risk if they expect higher non-financial returns (e.g., if the investment enhances socio-ecological well-being).
Inputs: The time value of money	A dollar *available* today is more valuable than a dollar available in the future, because the dollar available today can collect interest or be invested in a profitable project, thereby making it worth more in the future.	Akin to FBL, except in situations where SET practices enhance financial well-being.	A dollar *spent* today on a worthwhile cause is worth more than a dollar available in the future because the dollar spent today can save a life that would be gone tomorrow, or provide employment for someone who needs a job and wants to become a contributing member of society ("a stitch in time saves nine").
Outputs: The challenge of markets	Because of the competitive dynamics inherent in a well-functioning and efficient financial marketplace, earning exceptional financial returns can only be accomplished by achieving a sustainable competitive advantage and/or a monopoly.	Akin to FBL, except in situations where SET practices enhance financial well-being.	Because of the cooperative dynamics inherent in a well-functioning and holistic market, any member who takes exceptional financial returns and creates dysfunctional income inequality would be seen as threatening community well-being and frowned upon.[40] (Recall that the original idea of a "market" was a place where members of a community would gather, visit, and arrange to buy and sell goods and services.)
Outputs: The challenge of agency (refers to managers as agents acting on behalf of owners)	*The Agency Problem:* Because they are not owners, managers will be tempted to act in their own self-interests rather than to maximize the owners' financial interests. Compensation packages should align managers' financial self-interests with the owners'.	Akin to FBL, except in situations where SET practices enhance financial well-being.	*The Agency Solution:* Because (unlike typical owners) managers have a daily involvement in the firm, they may thus be more sensitive and can be more responsive to employees, suppliers, customers, neighbors, the environment, and so on.

ACCOUNTING

Accounting information systems collect, analyze, and communicate information about an organization's activities in financial terms. Most business schools have two basic accounting courses: 1) managerial accounting, which provides financial information to managers so they can make informed decisions about specific internal operations within the organization (e.g., the cost of different parts or services, the cost of keeping inventory in stock); and 2) financial accounting, which provides financial reports about the company as a whole to stockholders and the general public (e.g., profit-loss statements, balance sheets). A helpful way to compare the differences between FBL, TBL and SET approaches to accounting is to consider the fundamental assumptions each makes about accounting. Table 19.6 shows the four assumptions that underpin Generally Accepted Accounting Principles (GAAP) that provide the basis for how to do accounting.[41]

Table 19.6: Three approaches to interpreting the basic assumptions underpinning GAAP

Assumption	FBL	TBL	SET
Entity What unit of analysis is being held accountable?	The entity is the organization, narrowly defined as an individual unit clearly separated from its owners, members, and society.	Like FBL, except if SET is better financially.	The entity is the organization, broadly defined as a multi-faceted entity intimately connected with its owners, members, and society.
Unit of measure What is the firm being held accountable for?	The unit of measure is money, and the organization is accountable to maximize its financial resources (e.g., its assets minus its liabilities).	Like FBL, except if SET is better financially.	There are multiple measures (e.g., money, neighborliness, ecological footprint, providing meaningful work), and the firm is accountable to balance multiple forms of well-being for multiple stakeholders.
Periodic reporting How often is accounting information presented?	Reporting is according to calendar-time (linear, quarterly, annual), serving the interests of short-term investors.	Like FBL, except if SET is better financially.	Reporting takes into account the natural rhythms/seasons of organizational life, serving the interests of long-term stakeholders.
Going concern assumption What criteria are used to decide whether an entity is viable?	The assessment of whether an organization is a financially-viable "going concern:" (i) has a short-term time horizon (one year), (ii) focuses on financial measures, and (iii) is at the level of analysis of the single entity (ignoring non-financial externalities).	Like FBL, except if SET is better financially.	The assessment of whether an organization is a holistically-sustainable "going concern:" (i) has a long-term time horizon (e.g., considers future generations), (ii) takes into account multiple forms of well-being, and (iii) considers the organization's positive and negative socio-ecological externalities.

SUPPLY CHAIN MANAGEMENT

Supply chain management traditionally focuses on inter-organizational logistics, and specifically on ensuring that organizations find optimal ways to acquire the supplies they need from other organizations. This includes strategic purchasing (e.g., supplier selection, evaluation, and development; single versus multiple sourcing) and the management of inter-organizational relationships (e.g., supplier partnerships).[42] Differences between the FBL, TBL, and SET approaches are highlighted in Table 19.7.

Table 19.7: Three approaches to supply chain management[43]

	FBL	TBL	SET
Strategic purchasing	Choose suppliers who offer the best combination of: - Quality inputs (e.g., they have required features and meet specific standards); - Dependable delivery (e.g., on-time delivery, reliable transportation network); - Price (also includes factors like just-in-time delivery).	Akin to FBL, except if SET is also better finan-cially.	Choose suppliers who offer the best combination of: - Inputs that have a holistic range of qualities (include consideration of socio-ecological externalities); - Dependable delivery, including sustainable transportation networks; - Low total costs (i.e., including externalities).
Inter-orga-nizational relation-ships	Develop long-term relation-ships with suppliers nurturing: - Trust (increased access to supplier knowledge to develop products & services); - Supplier confidence to make long-term investments that enhance ability to supply; - Stable and integrated transportation of incoming logistics (lower financial costs).	Akin to FBL, except if SET is also better finan-cially.	Develop long-term relationships with suppliers that nurture: - Trust and healthy relationships (facilitates virtue and nurtures community); - Supplier confidence to invest in environmentally-friendly and socially-just technologies; - Development of incoming logistics that take externalities into account.

OPERATIONS MANAGEMENT

Operations management, which includes both production and service operations, refers to directing and controlling the processes that convert an organization's resources (inputs) into finished goods and services (outputs).[44] By way of a general summary, compared to FBL management, TBL and especially SET approaches place greater emphasis on: 1) designing cradle-to-cradle[45] organizational operations that minimize waste; 2) enhancing meaningfulness of jobs; 3) reducing environmental impacts and other externalities; and 4) welcoming a wide variety of stakeholders to participate in designing and evaluating organizational operations (e.g., systems are developed to allow members to evaluate the performance of their managers). Table 19.8 provides an overview of four key dimensions of operations management, and highlights differences between FBL, TBL, and SET approaches.

Table 19.8: Three approaches to four key dimensions of operations management

	FBL	TBL	SET
Quality of the products and services being created	Provide products/ services whose features and reliability are appropriate for the customer market being served.	Akin to FBL, except if SET is better financially.	Provide products and services whose features and reliability are appropriate for the customer market being served, and beyond (e.g., long-term socio-ecological well-being).
Dependability of delivering products and services	Provide timely and reliable delivery of products and services (which allows charging a premium price and thus enhanced profits).	Akin to FBL, except if SET is better financially.	Provide timely, reliable, and appropriate delivery of products and services, taking into account socio-ecological externalities of different modes of delivery.
Flexibility/ Speed of creating products and services	Ensure that products and services can be easily customized or changed to meet customer needs.	Akin to FBL, except if SET is better financially.	Ensure that products and services can be easily customized or changed to meet customer needs (and the needs of society beyond the customer).
Cost of creating products and services	Aim for the lowest *financial* expenditure possible to offer products and services (taking into account the desired quality, dependability, and speed).	Akin to FBL, except if SET is better financially.	Aim for the lowest total costs (i.e., including externalities) to offer products and services (taking into account the desired quality, dependability, and speed).

MARKETING

Marketing establishes information systems related to communication (promotion), distribution (place), exchange (price), and offerings (products and services) that have value for customers, buyers, clients, partners, and the overall society.[46] The marketing function has been famously broken down into four elements called the four Ps of marketing: Product, Price, Place (i.e., Distribution), and Promotion.[47] As described in Table 19.9,[48] the way these four Ps are understood and managed differs between FBL, TBL, and SET approaches. FBL management is more likely to view: 1) *product* as a self-contained commodity an organization offers (rather than emphasizing the relationships an organization fosters); 2) *price* as the financial price paid by the consumer (rather than emphasizing the costs and benefits borne by the rest of society); 3) *place* as finding a competitive position in the marketplace (rather than finding a position that fosters mutual cooperation in society); and 4) *promotion* as actions that help to sell the product (rather than to learn from others and thus offer products that essentially sell themselves).

Table 19.9: Three approaches to the four Ps of marketing

Four Ps	FBL	TBL	SET
Product Goods and services sold in the marketplace.	Offer products that satisfy wants or needs in the market.	Akin to FBL, except if SET is better financially.	Offer products that focus on meeting needs rather than wants, and on creating positive socio-ecological externalities.
Price The amount of money (and other effort) that consumer pays for a product	Set a price that maximizes profits.	Akin to FBL, except if SET is better financially.	Price includes socio-ecological externalities, and is infused with relationships and involves a firm's (and a consumer's) contribution to social justice and value creation.
Place Physical and virtual marketplaces where consumers can purchase goods and services	Provide convenient and cost-effective marketplaces.	Akin to FBL, except if SET is better financially.	Offer socio-ecologically sustainable places (e.g., energy-efficient buildings) and distribution channels (e.g., cradle-to-cradle designs), recognizing that a firm is not a self-contained unit competing with others, but rather belongs to a network of stakeholders.
Promotion Unified messages that are clear, consistent and compelling, and create awareness, educate, persuade, and connect with consumers.	Develop promotion strategies that maximize an organization's financial well-being.	Akin to FBL, except if SET is better financially.	Develop promotion strategies that encourage sustainability, challenge conventional social norms about consumerism, and foster and enable stakeholders to exchange ideas about enhancing socio-ecological well-being.

Control in Entrepreneurship

As we noted at the start of the chapter, the control function plays an important role in every part of managing an organization. It is relevant for entrepreneurs, who need to be thinking about issues such as their value chain/loop, performance standards, and information systems from the beginning of their planning. Therefore, all of the foregoing information in this chapter is directly applicable to entrepreneurs. However, there are two additional considerations distinctive to entrepreneurship that can also influence how control is managed in a start-up: founder effects, and scaling issues.

FOUNDER EFFECTS

The entrepreneurs who start organizations are referred to as founders, and the specific qualities of founders can have important and long-lasting effects on their organizations.[49] The opening case discussion of Westward Industries highlights these founder effects; Michael Mauws, the new CEO, had trouble changing operations because members were more familiar with the old way of operating under the founding CEO (Larry). Even if Michael's new ideas were better, the old ways were familiar and "normal," so members tended to stick with them.[50] Founder effects are an example of **organizational imprinting**, *which is the tendency for organizations to take on qualities that reflect conditions when they were founded and to continue displaying those qualities after the founding stage*.[51] Because of imprinting, an organization's culture and strategy often reflect idiosyncrasies of its founders, even after decades of operation and the departure of the founder.[52]

The power of founder effects has important implications for entrepreneurs. Those starting new organizations should think carefully about the practices they create and use. A behavior that is "good enough for right now" may become institutionalized and resistant to change in the future. In particular, the control systems that entrepreneurs use in the early days can come to define what is normal for far longer than the entrepreneur may wish. Although Interface, Inc. was able to change from an FBL to a SET management approach (Chapter 14), such changes are difficult. The way an organization operates influences who is in it, both in terms of who is hired and who stays. People who like the current ways of working, and succeed under them, will remain, while those who do not will leave. Moreover, time and use will make the current ways of working into habits. As a result, most organizational members will resist changing, because doing something new leads to uncertainty and possible loss. Indeed, even outside parties tend to contribute to the strength of founder effects. For example, firms receive more support from external investors when they are led by their founder than if led by someone else.[53]

A behavior that is "good enough for right now" may become institutionalized and resistant to change in the future.

A related matter concerns the entrepreneur's suitability to continue to manage the organization once it is established and operating. Recall that most organizations develop in a predictable sequence that takes them from a simple organizational design to a defender organization design (Chapter 14). This change involves becoming more mechanistic in structure, with jobs becoming more narrowly specialized, rules becoming more formalized, and many other changes that reduce the freeform and ad hoc operation of a simple start-up (Chapter 12). The managerial skill set required for these two organization designs is different in important ways. In fact, start-ups often fail because the founding entrepreneurs, who may be excellent at getting an organization started, lack the skills or attitudes required to manage an ongoing business. Moreover, even if the founding entrepreneur could continue to manage operations, that does not mean that he or she wants to. Some entrepreneurs love the challenge of the start-up and see the regularity of normal operations as drudgery. Such serial entrepreneurs would likely prefer to leave a successfully started firm and start another one.

Start-ups often fail because the founding entrepreneurs, who may be excellent at getting an organization started, lack the skills or attitudes required to manage an ongoing business.

SCALING ISSUES

Scalability, *which refers to the ability of a system to perform well under an increased workload or scope of operations*, is an important consideration for many entrepreneurs. Because of the dominance of the FBL approach, it is often assumed that all entrepreneurs are growth-oriented and want to make their new organization as large as possible.[54] But this desire is not universal; there are many micropreneurs, who are content to have a sustainable organization without it being the largest. Nonetheless, even micropreneurs need to think about scalability, and with it an increased emphasis on control systems, because mature organizations, even small ones, have different coordination and control systems and needs than do start-ups. All entrepreneurs need to think about scale, and thus control, for long-term operations.

The demands of scalability cause the common situation noted above where successful founders are either unwilling or unable to successfully manage the mature, scaled-up organization. The Westward Industries case illustrates some of these issues. Founder Larry Mauws preferred to invent and refine products. He was good at it, and it was his favorite activity. He did not like to spend his time establishing performance goals, setting up information and control systems, keeping track of inventory, and so on. As Michael noted, "Larry was more interested in building a car than in building an organization." This narrow focus on product design and quality was crucial to the company's initial success, but as the firm and its operations grew, Larry's management style did not scale. His style did not work equally well in a larger, more complex firm.

Once an entrepreneurial start-up is established and working well, the entrepreneur must confront the issue of scale by deciding whether to continue owning the organization or to sell it. As a part of making this ownership choice, the entrepreneur also must choose whether to stay with the organization or to leave it. These options are discussed below.

Keeping the organization

If the entrepreneur chooses to retain ownership of the start-up, two important decisions need to be made: whether to grow the organization or maintain it, and what role the founder will play in the organization's future. In many cases, these decisions reflect what type of entrepreneur the founder is (Chapter 1). Mircopreneurs will prefer to maintain the organization's size, growing it just large enough to be sustainable and achieve its goals. In contrast, growth-oriented entrepreneurs will want to expand the organization. Often SET entrepreneurs will choose to maintain their organization at a viable level, while FBL and TBL entrepreneurs seek maximal growth. However, this pattern does not always hold. For example, craft-oriented FBL entrepreneurs may be content to have a business that pays the bills and allows them to practice their craft (e.g., traditional artists, micro-brewers). Likewise, there are certainly growth-oriented SET entrepreneurs who seek to help people all over the world or introduce some fundamental change.

When deciding how large the organization should be, the entrepreneur must also decide on his or her role in it. Some entrepreneurs will choose to remain active in the organization and continue to lead it. This choice is most common among monopreneurs, who often have the goal of starting one organization and managing it for the rest of their careers. In contrast, serial entrepreneurs may prefer to let someone else manage the organization for them, and turn their attention to other projects, either within the organization as intrapeneurs or starting a whole new organization. The management approaches do not differ in terms of *what* decision they make in this regard, but rather in *why* they make it. An FBL entrepreneur will choose to stay or go depending on which choice promises the greatest financial return (e.g., if the entrepreneur lacks the management skills to maximize growth and profit, the entrepreneur should leave). TBL entrepreneurs, with their attention to socio-ecological issues, may also consider the lifestyle implications of their choice (e.g., avoiding long hours by letting others manage vs. doing what they love by staying). SET entrepreneurs, like their FBL counterparts, will often choose the option that will produce the best outcome, but in their case "best" is defined in terms of optimizing positive socio-ecological externalities, rather than dollars.

Selling the organization

When entrepreneurs choose to sell their organization, they have made the decision to no longer be the owner, though they may continue to manage the organization on behalf of the new owners. In the FBL approach, selling a start-up is referred to as **harvesting**, *which is withdrawing one's financial investment (i.e., ownership) in an organization with the intent of achieving financial gain by doing so*. Harvesting is also common for TBL entrepreneurs, as both groups aim to maximize their financial gains from having owned the organization. In contrast, SET entrepreneurs may be more focused on the continued success of the organization after they leave. As a result, the typical SET approach is better reflected in **seeding**, *which is transferring one's ownership to new owners with the intent of facilitating further socio-ecological well-being by doing so.* For example, some organizations use employee stock ownership plans (ESOPs) to transfer control of the organization from the founder to the members. In these plans—as part of retirement contributions, bonus programs or profit-sharing—the current owner's stocks are transferred to employees so that eventually the (former) owner has no investment in the organization, which then belongs entirely to the employees.

Once an entrepreneurial start-up is well established, the entrepreneur must decide whether to continue owning the organization or to sell it.

Entrepreneurs wanting to sell their start-ups usually choose one of two methods. One method is through an **Initial Public Offering (IPO)**, *which involves the selling of ownership shares on a public securities exchange for the first time.* For example, in early 2017, Snap Inc., the organization that owns Snapchat (an image messaging and mobile media application), had an IPO in which it offered 200 million shares on the New York Stock Exchange. Before that IPO, the company had been privately owned. IPOs are a high-profile way to sell an organization, because they tend to attract media attention, especially when they involve large numbers (e.g., the initial Snap shares were sold for $17 each, which means the firm was sold for more than U.S. $3 billion).

The second, and more common, method of selling ownership is having the start-up transferred to another owner. Often such a transfer involves being acquired by a different organization, such as a large, established firm that sees a strategic advantage in owning the product or service the entrepreneur has created. For example, Google (or more accurately Google's owner, Alphabet Inc.) has acquired hundreds of organizations, such as virtual reality game designers Owlchemy Labs and the Meebo instant message service. Similarly, as part of a TBL strategy, it is common for large TBL food companies to acquire smaller brands that have strong reputations for producing local, organic or socially responsible products (e.g., Danone bought Stonyfield Farm, General Mills bought Annie's Homegrown, and Unilever bought Ben & Jerry's). Because the SET approach emphasizes partnership while de-emphasizing competition and the maximization of financial self-interests, such organizations are less likely to engage in strategic acquisition of other companies.

However, acquisition by a larger firm is only one way to change ownership. Exiting entrepreneurs may also sell or otherwise transfer the organization directly to another individual or group. ESOPs are an example of this sort of transfer. Likewise, in family businesses, the founding parents may give the organization to their children to carry on the family legacy. And some organizations have been sold or given into the care and ownership of long-term members.

Regardless of the method they use, entrepreneurs typically sell their organization when they do not want to manage it as a scaled-up, mature enterprise. In some cases, the selling owner is a serial entrepreneur, who wishes to leave the organization and start another project. In other cases, the selling owner stays with the organization in some non-ownership role. Although it was not an acquisition, Larry Mauws' move from CEO to VP of R&D in the opening case is the sort of move that some acquired entrepreneurs make. By selling their ownership, they can stay with the organization but also limit their activities to the part of the organization that they like best, which often means that they avoid the work of developing comprehensive information and control systems described in this chapter.

CHAPTER SUMMARY

1. The four-step control process helps to ensure that the actions of organizational members are consistent with the organization's underpinning values and standards.

2. In the FBL approach to the four-step control process, managers:

1) establish key organizational performance standards related to financial performance by understanding the overall value chain, and identifying the key activities and outcomes that need to be monitored

2) monitor performance by developing top-down information systems to measure the key performance standards

3) evaluate performance, remembering that organizational systems themselves may be a cause of poor performance

4) respond accordingly using a top-down rational process.

3. In the TBL approach to the four-step control process, managers rely on FBL practices and, in situations where it is in their financial interests to do so, they work with key stakeholders to:

1) establish key organizational performance standards, balancing triple bottom line performances measure by understanding the overall value loop, and identifying the key activities and processes that need to be monitored

2) monitor performance by developing information systems to measure the key performance standards

3) evaluate performance, remembering that organizational systems and how they affect socio-ecological systems may be a cause of poor performance

4) respond accordingly using a multilateral bottom-up approach.

4. In the SET approach to the four-step control process, managers work with stakeholders to:

1) establish key organizational performance standards with a focus on enhancing socio-ecological well-being by understanding the overall value loop, and identifying the key activities and processes that need to be monitored

2) monitor performance by developing bottom-up information systems to measure the key performance standards

3) evaluate performance, remembering that organizational systems and how they affect socio-ecological systems may be a cause of poor performance

4) respond accordingly using a multilateral bottom-up approach, where members often make needed changes on their own.

5. The main functions of business (HRM, finance, accounting, supply chain management, operations management, and marketing) each contribute to the overall information system that enables managers to control organizational inputs, conversion processes, and outputs.

FBL and TBL variations of these business functions tend to focus on top-down, quantifiable financial wealth maximizing processes.

A SET variation of business functions tends to focus on bottom-up, qualitative and socio-ecological wellness maximizing processes (some of which are evident in TBL management, in situations where they enhance financial well-being).

6. Entrepreneurial start-ups need control systems like any other organization. Attempts to implement appropriate changes to those initial systems as the organization matures can be difficult because of founder effects, and are influenced by the founder's ability and desire to manage and control the organization once it moves out of the start-up phase.

Questions for Reflection and Discussion

1. Now that you have read the chapter, consider again the opening case. Why was Michael Mauws unable to get the employees to change their views about how Westward was managed while he was CEO, but they changed their views after he left? What does this tell us about the importance of information systems versus the importance of leadership?

2. Describe the four steps of the control process. Compare and contrast the managerial actions and assumptions that are evident in the FBL, TBL, and SET approaches for each of the four steps in the process.

3. What is the difference between *data* and *information*? Describe a situation at an organization that you know about where what were formerly data are now treated as valuable pieces of information. Can you think of the reverse situation, that is, where information has become data? Explain your answer.

4. Describe the difference between feedforward, concurrent, and feedback controls. What are the management challenges associated with each?

5. Consider the following statement: “Because value chains are simpler than value loops, and because managers opt for the simplest cause-and-effect relationships that are relevant, learning about value loops is of little value to most managers.” Do you agree or disagree with the statement? Explain your reasoning.

6. Draw a value loop that describes a key economic transaction in your personal life (e.g., purchasing food, transportation, clothing, etc.).

7. Which of the functional areas of a business firm (HRM, finance, accounting, supply chain management, operations management, and marketing) do you think is the most important part of the control process for FBL management? For TBL management? For SET management? Explain your reasoning.

8. Which one of the functional areas of a business firm is the most difficult one to manage from a SET approach? Explain your answer.

9. Consider the following statement: “Thanks to computer-based technology there is a de-emphasis on things that are difficult to measure quantifiably, such as compassion, empathy, meaningful work, aesthetic beauty, and neighborliness. As a result, higher-order virtues and noble goals like peace, love, joy, prudence, wisdom, and so on have also been de-emphasized. Because these ideas are difficult to measure with computer-based information systems, they are not included in the category of meaningful information in organizations. When we do not look into the eyes of workers on the shop-floor in low-income countries we miss out on a whole lot of meaning, and our information systems have failed us.” Do you agree or disagree with the statement? Explain your reasoning.

10. You have been developing an Entrepreneurial Start-Up Plan for an organization you might like to create. Based on your work in previous chapters, design the control systems for this potential organization. What performance standards will you use? How will you monitor them and evaluate them? What is your plan for responding when those standards are not being met? Explain your answers.

ENDNOTES

Endnotes for Chapter 1

[1] Chhabra, E. (2016, April 1). How five college friends turned a social enterprise into a million dollar brand. *Forbes*. https://www.forbes.com/sites/eshachhabra/2016/04/01/how-this-social-enterprise-competes-with-instant-gratification-and-rock-bottom-prices/#5e939fed5e93

[2] (2014, Sept 15). 31 Bits International Director and Founder Kallie Dovel. *The every girl*. http://theeverygirl.com/31-bits-international-director-and-founder-kallie-dovel

[3] See company website. http://31bits.com/about/our-story/

[4] 31 bits founder story: What if they never tried to change the world. (2014, June 17). http://blog.sevenly.org/31-bits-founder-story-never-tried-change-world/

[5] Chhabra, E. (2016, April 1). How five college friends turned a social enterprise into a million dollar brand. *Forbes*. https://www.forbes.com/sites/eshachhabra/2016/04/01/how-this-social-enterprise-competes-with-instant-gratification-and-rock-bottom-prices/#5e939fed5e93

[6] See company website: http://31bits.com/about/our-story/

[7] Pages 12-13 in Drucker, P. F. (2001). *The essential Drucker*. New York, NY: Harper Collins.

[8] Fayol, H. (original in French 1916) *General and industrial management*. Dunod: Paris. Fayol actually identified a fifth function, coordination, but most scholars today believe the first four capture the functions of management.

[9] Mintzberg, H. (1973). *The nature of managerial work*. New York: Harper & Row. See also Kurke, L. B., & Aldrich, H. E. (1983). Note—Mintzberg was right!: A replication and extension of the nature of managerial work. *Management Science*, 29(8): 975-984. Luthans, F., Rosenkrantz, S. A., & Hennessey, H. W. (1985). What do successful managers really do? An observation study of managerial activities. *The Journal of Applied Behavioral Science*, 21(3): 255-270.

[10] According to Mintzberg (1973: 54), a role is defined as an organized set of behaviors belonging to an identifiable office or position. Individual personality may affect *how* a role is performed, but not *that* it is performed.

[11] Note that the relative emphasis on the different roles changes across an organization's hierarchy, with "leader" role more important at lower levels, and top managers placing greater emphasis on disseminator, figurehead, negotiator, liaison and spokesperson roles (e.g., see page 9 in Robbins, S.P., & Coulter, M. (2003). *Management – 7th Edition*. Upper Saddle River, NJ: Prentice Hall).

[12] This discussion draws from a study which analyses the video-tapes of actual managers and uses the Fayolian functions and Mintzbergian roles to categorize each activity (Dyck, B. & Kleysen, R. (2001). Aristotle's virtues and management thought: An empirical exploration of an integrative pedagogy. *Business Ethics Quarterly,* 11 (4): 561-574). Of course, our description here is somewhat of a simplification -- for example, the spokesperson role is critical in both planning and leading, and the figurehead role is an important aspect of controlling as well as organizing.

[13] Part of this role includes taking inputs from other parts of the organization, and disseminating information on overall organizational values to subordinates who use it as a guide in decision-making. Note that for Mintzberg the dissemination of values occurs in terms of specific statements on specific issues, not in terms of lofty global principles (Mintzberg, 1973: 97).

[14] Note that the Figurehead role can also sometimes be seen to be part of the Controlling function, since it draws attention to the importance of symbols in the Controlling function.

[15] This section draws on three papers. An extended discussion of conventional and alternative Weberian ideal-types of management is presented in Dyck, B. & Schroeder, D. (2005). Management,

theology and moral points of view: Towards an alternative to the conventional materialist-individualist ideal-type of management. *Journal of Management Studies,* 42 (4): 705-735. Two ideal-types are contrasted and compared in Dyck, B. & Weber, M. (2005). Conventional and radical moral agents: An exploratory look at Weber's moral-points-of-view and virtues. *Organization Studies* 27(3): 429-450; and we also draw on Dyck &. Kleysen (2001).

[16] Page 471 in Robbins & Coulter (2003).

[17] Based on a variety of sources, including: Black (2015). *Sustainability*. SAGE BusinessResearcher. SAGE Publishing Inc. DOI: 10.1177/2374556815574849; Hegele, C. & Kieser, A. (2001). Control the construction of your legend or someone else will: An analysis of texts on Jack Welch. *Journal of Management Inquiry*, 10(4): 298-309; Morris, B. (2006). The new rules. *Fortune* (July 24): 70-87; Schwartz, N.D. (2007) Is G.E. too big for its own good? *The New York Times* (July 22). O'Boyle, T.F. (1998) *At any cost: Jack Welch, General Electric, and the Pursuit of Profit*. New York: Alfred A. Knopf. Williams, E. F. (2015). *Green giants: How smart companies turn sustainability into billion-dollar businesses*. AMACOM Division of the American Management Association. In particular, our description of Jack Welch draws on other management textbooks we searched in 2008, when Welch was the most-cited manager in a content analysis of six top-selling management textbooks.

[18] Page 197 in Griffin, R.W. (2002). *Management – 7th edition*. Boston, MA: Houghton Mifflin Company. Page 340 in Jones, G.R. & George. J.M. (2003). *Contemporary management – 3rd edition*. New York: McGraw-Hill.

[19] Page 667 in Daft, R.L. (2003). *Management – 6th edition*. Mason, Ohio: Thomson South-Western.

[20] Page 560 in Daft (2003).

[21] Page 667 in Daft (2003).

[22] Weber's argument has reverberated in the literature often over the past century (for a review, see Dyck & Schroeder, 2005). In their award-winning paper, Ferraro, Pfeffer & Sutton (2005) underscore how assuming that students are materialistic and individualistic becomes a self-fulfilling prophecy. They suggest that economics (financial materialism) has "won the battle for theoretical hegemony in academia and society as a whole" (p. 10) and that its most fundamental idea is self-interest (individualism). Ferraro, F., Pfeffer, J. & Sutton, R.I. (2005). Economic language and assumptions: How theories can become self-fulfilling. *Academy of Management Review*, 30(1): 8-24.

[23] Moreover, interference by government would minimize the effectiveness of the invisible hand.

[24] Smith, A. (1776). *Wealth of nations.* London, Methuen & Co.

[25] Smith (1759). *Theory of moral sentiments.* Printed for A. Millar, in the Strand; and A. Kincaid and J. Bell. Edinburgh, Edinburgh.

[26] An organization is rightly ordered when its structures and systems are arranged in a way that maximizes the net balance of satisfaction of all its members. McKay, R. B. (2000). Consequential utilitarianism: Addressing ethical deficiencies in the municipal landfill siting process. *Journal of Business Ethics*, *26*(4): 289-306.

[27] The first quote in the textbox is taken from Friedman, M. (1970, Sept 13). The social responsibility of business is to increase its profits. *New York Times Magazine*, 32-33, 133-124. Elsewhere Friedman's support for a consequential orientation is evident when he says that "One of the great mistakes is to judge policies and programs by their intentions rather than their results [consequences]." Taken from a 1975 (Dec 7) interview on *The Open Mind* with Richard Heffner.

[28] Williams (2015).

[29] Opinion page, (2001, July 4). Jack Welch's legacy. *New York Times.* http://www.nytimes.com/2001/07/04/opinion/jack-welch-s-legacy.html

[30] O'Boyle, 1998; see also Litz, R. (2003). Book review essay: Looking at both sides--Jack Welch in review, *Academy of Management Review*, 28: 670-673.

[31] Page 156 in Hohensee, J. (2013). Corporate reporting and externalities. Transforming the corporation into a drive of sustainability. In Worldwatch Institute, *State of the World 2013: Is Sustainability still possible?,* Chapter 13 (154-160). Island Press: Washington.

[32] "Almost half the world — over three billion people — live on less than $2.50 a day." See this and other interesting facts at: Shah, A. (2013, Jan 7). Poverty facts and stats. Found at http://www.globalissues.org/article/26/poverty-facts-and-stats

[33] Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone Publishing.

[34] Brundtland, 1987, p. 8; emphasis added here. *Brundtland Report: Our common future* (1987). World Commission on Environment and Development (vol. 383). Oxford, UK: Oxford University Press.

"Sustainable development is a dynamic process which enables people to realize their potential and improve their quality of life in ways which simultaneously protect and enhance the earth's life support systems" (*Forum of the Future*. (n.d.). What is sustainability. Retrieved 14.04.2016, from http://www.globalfootprints.org/sustainability

[35] Page 397 in Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone Publishing.

[36] Page 5 in Epstein, M. J., & Buhovac, A. R. (2014). *Making sustainability work: Best practices in managing and measuring corporate social, environmental, and economic impacts*. Berrett-Koehler Publishers.

[37] However, there is still work to be done here, as reported Editorial Board, (2015, Sept 4). G.E., Finish the job on the Hudson. *New York Times*. https://www.nytimes.com/2015/09/04/opinion/ge-finish-the-job-on-the-hudson.html?: "The river is still contaminated and it's still General Electric's fault. Toxic industrial waste is still flowing down nearly 200 miles of river from north of Albany to New York City. And though the company has spent the last six years digging up the PCBs that it dumped into the river decades ago, it is about to walk away from an unfinished job. It is getting ready to dismantle its dredging operation this fall, and leave 136 undredged acres for others to worry about."

[38] Black (2015), Williams (2015).

[39] Page 32 in Williams (2015).

[40] Page 34 in Williams (2015).

[41] Horowitz, J., & Mullen, (2017, June 2). Top CEOs tell the CEO president: You're wrong on Paris. *CNN Money*. http://money.cnn.com/2017/06/01/news/ceos-respond-trump-paris-agreement/index.html

[42] Williams (2015).

[43] Messner, W. (2013). Making the compelling business case. London, UK: Palgrave Macmillan.

[44] Buhr, N., Gray, R., & Milne, M. J. (2014). Histories, rationales, voluntary standards and future prospects for sustainability reporting. In J. Bebbington, J. Unerman and B. O'Dwyer (Eds*), Sustainability Accounting and Accountability, 2nd edition* (pp 51-71). Routledge: Abingdon Oxon.

[45] However, there is still debate in the literature on this topic. Dixon-Fowler, H. R., Slater, D. J., Johnson, J. L., Ellstrand, A. E., & Romi, A. M. (2013). Beyond "does it pay to be green?" A meta-analysis of moderators of the CEP–CFP relationship. *Journal of Business Ethics*, *112*(2): 353-366.

[46] Robinson, M., Kleffner, A., & Bertels, S. (2011). Signaling sustainability leadership: Empirical evidence of the value of DJSI membership. *Journal of Business Ethics*, *101*(3): 493-505.

[47] *DJSI 2016 Review Results* (Sept 2016). http://www.robecosam.com/images/review-presentation-2016.pdf

[48] Kiron, D., Kruschwitz, N., Rubel, H., Reeves, M. and Fuisz-Kehrback, S.-K. (2013, Dec). Sustainability's next frontier: Walking the talk on the sustainability issues that matter most: Findings from the 2013 Sustainability & Innovation Global Executive Study and Research Project. *MIT Sloan Management Review*: 1-26.

[49] Lu, L., Bock, D., & Joseph, M. (2013). Green marketing: what the Millennials buy. *Journal of Business Strategy*, *34*(6): 3-10.

[50] Riillo, C. A. F. (2017). Beyond the question "Does it pay to be green?": How much green? and when?. *Journal of Cleaner Production*, 141: 626-640.

[51] Ajibo, C. C. (2014). A critique of enlightened shareholder value: Revisiting the shareholder primacy theory. *Birkbeck Law Review*, *2:* 37.

[52] However, the process was typically one of hardening or becoming rigid, which we don't mean. Rather, we look more at the on-going processes and rhythms of management, just as the regular setting of the sun. These ideas on the meaning of set were drawn from http://www.etymonline.com/index.php?term=Set&allowed_in_frame=0

Finally, although SET management has nothing to do with Egyptian deities, note that the Egyptian god Set was born of the earth god (*Geb*) and the sky goddess (*Nut*). Set had traditionally been the god of foreigners/outsiders, and was demonized by Egyptians when they were conquered by foreign nations, and later became the "Lord of the Oasis/Town." In our terms, SET management champions ideas conventional management considers "foreign" (socio-ecological well-being), may be demonized by anyone who feels threatened by the socio-ecological crises facing humankind (and wants to return to the good old days), and SET management may become the go-to approach for identifying the niches/oases where humankind can flourish. (Drawing information from wiki https://en.wikipedia.org/wiki/Set_(deity))

[53] Glassman retired from Greyston in 1996. The firm is now located in a relatively poor part of Yonkers, New York.

[54]See company website. http://greyston.com/2014/12/fair-trade-ingredients-another-reason-enjoy-greyston-brownie/. Greyston is also involved in ecologically responsible initiatives, such as "installing LED lights to reduce energy usage by over 60% and installing solar panels on its roof to decrease its carbon footprint" Wilburn, K., & Wilburn, R. (2014). The double bottom line: Profit and social benefit. *Business Horizons*, *57*(1): 11-20.

[55] Note that Make Brady has been CEO of the bakery since 2012. Brady describes several benefits of Open Hiring, including:

> "1. We focus the majority of our onboarding resources on employee training, rather than on interviews and background checks, which is a cost effective means of growing the workforce.
>
> 2. We train our community's most economically disadvantaged residents and provide them with skills that can break the cycle of poverty in their families.
>
> 3. We generate two million dollars in savings to Westchester County through reduced recidivism."

Besonen, J. (2017, Jan 13). 2017 Leadership Awards: Business Leadership: Mike Brady; Greyston Bakery and Greyston Foundation. *Specialty Food Magazine*. https://www.specialtyfood.com/news/article/2017-leadership-awards-business-leadership-mike-bradygreyston-bakery-and-greyston-foundation/. Keeley, M., & French Dunbar, M. (2015, Jan). How Greystone bakery is using brownies to fight poverty. *Company Conscious Media.* https://consciouscompanymedia.com/workplace-culture/diversity-inclusion/how-greyston-bakery-is-using-brownies-to-fight-poverty/

[56] These Buddhist principles reflect Glassman's background as a Zen Buddhist monk. Weber, J. (2009). Using exemplary business practices to identify Buddhist and Confucian ethical value systems. *Business and Society Review*, 114(4), 511-540.

[57] The main reason employees fail to complete the apprenticeship is that they are late for work (Keeley & French Dunbar, 2015).

[58] According to Mike Brady, current CEO of Greyston: "There is no substitute for articulating a clear vision and being transparent when reporting on your successes and failures in pursuit of that vision. ... Give everyone an equal chance to be successful, hold people accountable for their behavior, and encourage open dialogue from anyone that has a suggestion for improving the business." (Keeley & French Dunbar, 2015).

[59] Mattison, R., Trevitt, M. & van Ast, L. (2010). *Universal ownership: Why environmental externalities matter to institutional investors.* London and Geneva: UNEP Finance Initiative/Principles for Responsible Investment Association.

[60] For more on this general topic, see Carolan, M. (2014). *Cheaponomics: The high cost of low prices*. London: Routledge; Sheehy, B. (2012). Corporations and social costs: The Wal-Mart case study. *Journal of Law & Commerce (2004)*, 24(1): 1-55.

[61] Enbridge spilled about 20,000 barrels worth of oil in the Kalamazoo River in Michigan. Gunther, M. (2012, Sept 13). Why sustainability rankings matter—but maybe shouldn't. *Greenbiz*. https://www.greenbiz.com/blog/2012/09/13/why-sustainability-rankings-matter

[62] "On the one hand, business and related activities are at the centre of the production–consumption system that is the major cause of our sustainability problems. On the other hand, the dynamism of modern business and its ability to innovate and generate solutions to current and emerging problems, including those related to sustainability, promises to be one of the primary sources of new ideas and strategies to tackle the sustainability challenges we face." Quote from: Gaziulusoy, A. I., & Twomey, P. (2014). Emerging approaches in business model innovation relevant to sustainability and low-carbon transitions. *Visions and Pathway*. DOI: 10.13140/RG.2.1.3019.0329

[63] Aristotle (1962). *Nichomachean Ethics* (trans. M. Oswald). New York. MacMillan Publishing.

[64] Leshem, D. (2016). Retrospectives: What did the Ancient Greeks mean by Oikonomia? *Journal of Economic Perspectives*, 30(1), 225-238.

[65] This review of how the four cardinal virtues are evident in community draw form and adapt a review of the literature and discussion in Dyck, B., & R. Manchanda (2017). Sustainable Marketing 2.0: A virtue theory based approach. *Working Paper*, University of Manitoba.

[66] Spiller, C., & Wolfgramm, R. (eds.) (2015). *Indigenous spiritualities at work: Transforming the spirit of the enterprise.* Charlotte, NC: Information Age Publishing.

[67] West, A. (2014). Ubuntu and business ethics: Problems, perspectives and prospects. *Journal of Business Ethics*, *121*(1): 47-61.

[68] This figure draws from Kurucz, E. C., Colbert, B. A., & Marcus, J. (2014). Sustainability as a provocation to rethink management education: Building a progressive educative practice. *Management Learning*, *45*(4): 437-457. See also Marcus, J., Kurucz, E. C., & Colbert, B. A. (2010). Conceptions of the business-society-nature interface: implications for management scholarship. *Business & Society*, *49*(3): 402-438.

[69] Dyck, B., Walker, K., Starke, F., & Uggerslev, K. (2012). Enhancing critical thinking by teaching two distinct approaches to management. *Journal of Education for Business*, 87(6): 343-357.

[70] Arum, R., & Roksa, J. (2011). Academically adrift: Limited learning on college campuses. Chicago, IL: University of Chicago Press. See also literature reviewed in Dyck et al. (2012).

[71] Martin, R. (2007). How successful managers think. *Harvard Business Review*, 85(6): 60-67.

[72] Godard, J. (1992). Education vs. training in business schools: The case of Industrial Relations. *Canadian Journal of Administrative Sciences*, 9: 238-252.

[73] Dyck, B., Walker, K., Starke, F. & Uggerslev, K. (2011). Addressing concerns raised by critics of business schools by teaching multiple approaches to management. *Business and Society Review,* 116 (1): 1-27.

[74] Research suggests that business students become increasingly materialist-individualist over their program of studies, thanks to the self-fulfilling prophecies that underlie the conventional FBL management paradigm they are taught. For a review see Ferraro, Pfeffer, & Sutton (2005: recipient of the Academy of Management Review "Best Paper of the Year"). See also Krishnan, V. R. (2003). Do business schools change students' values along desirable lines? A longitudinal study. In A.F. Libertella, & S.M. Natale (Eds.) *Business education and training: A value-laden process*, vol 8. Lanham, Maryland: University Press of America: 26-39.

[75] Dyck, B. (2017). Reflecting on 25 years teaching, researching, and textbook-writing for introduction to management: An essay with some lessons learned. *Journal of Management Education.* 1052562917693381.

[76] Dewaele, J. M. (2015). Bilingualism and multilingualism. *The International Encyclopedia of Language and Social Interaction*. 1- 11. doi: 1002/9781118611463.wbielsi108

[77] Cenoz, J. (2013). The influence of bilingualism on third language acquisition: Focus on multilingualism. *Language Teaching*, *46*(1): 71-86.

[78] This is based on several studies: Dyck et al. (2011, 2012).

[79] Zetlin, M. (2013, Dec 17). Survey: 63% of 20-somethings want to start a business. *Inc*. https://www.inc.com/minda-zetlin/63-percent-of-20-somethings-want-to-own-a-business.html

"If you're under 30 years old, you probably want to run your own business. That's the finding of a recent University of Phoenix survey. In the 1,600 adults surveyed, 63 percent of people in their 20s either owned their own businesses or wanted to someday, and of those who were not already entrepreneurs, 55 percent hoped to be in the future.

And while the urge to be your own boss isn't confined to the young, people under 30 have more of an entrepreneurial itch than their older counterparts. In the survey, the older the respondent, the lower the likelihood that he or she had entrepreneurial ambitions. Only 26 percent of those over 60 not already running their own businesses had any desire to do so."

[80] Note that the Stephan et al. (2015) do not talk about FBL, TBL and SET approaches per se. They call the three main bundles of reasons: "financial," "autonomy and better work," and "challenge and opportunity." These three motivations are also consistent with an earlier review of the literature on this topic. Stephan, U., Hart, M., Mickiewicz, T., & Drews, C. C. (2015). Understanding motivations for entrepreneurship. *BIS Research Paper No. 212*: Department for Business Innovation & Skills. London, UK. http://publications.aston.ac.uk/25296/1/Understanding_motivations_for_entrepreneurship.pdf

[81] Stephan, et al. (2015).

[82] Mielach, D. (2013, June 19). The number one reason most entrepreneurs start businesses. *Business News Daily*. http://www.businessnewsdaily.com/4652-entrepreneur-motivation-benefits.html

[83] Ladd, T. (2016). Customer development and effectuation: a review of textbooks to teach a contemporary introduction to entrepreneurship. *Management Teaching Review*, 1: 205–210.

[84] The GEM data show that financially motivated entrepreneurs are more likely to be male and their start-ups are more likely to include with family members.

[85] Emphasis added here. And 63% rated "To have greater flexibility for my personal and family life" as important.

[86] For example, see Good, W. (2008). *Building a dream: a Canadian guide to starting your own business.* Toronto, ON: McGraw-Hill or Longenecker, J. G., Petty, J. W., Palich, L. E., & Hoy, F. (2013). *Small business management (17th edition)*. Stamford, CT: South-Western College.

[87] The study also show that entrepreneurial ventures motivated by reasons related to autonomy and better work have a higher survival rate than financially-motived start-ups, and that the more educated the entrepreneurs, the higher the survival rate of the firm. Stephan, et al. (2015).

[88] "To fulfill a personal vision" was rated "important" by 64% of entrepreneurs. When given opportunity to respond to the question: "In your own words, what were the reasons for wanting to a business" 10% of entrepreneurs mentioned that they "Wanted to help others." Stephan, U., Hart, M., Mickiewicz, T., & Drews, C. C. (2015). Understanding motivations for entrepreneurship. *BIS Research Paper No. 212*: Department for Business Innovation & Skills. London, UK.

[89] Stephan, et al. (2015).

[90] In fact, the firms of entrepreneurs who start for financial reasons are larger (have more job growth) than firms started for other reasons. Stephan, et al. (2015).

[91] Schwab, H. (2016, March). Introducing the 2016 Social Entrepreneur of the Year Awardees. *World Economic Forum.* https://www.weforum.org/agenda/2016/03/11-social-entrepreneurs-who-are-changing-the-world/

[92] Schwab, H. (2017, March) Meet the Social Entrepreneurs of the year 2017. *World Economic Forum.* https://www.weforum.org/agenda/2017/03/2017-social-entrepreneurs/

[93] Elgin, D. (1993) *Voluntary Simplicity: Toward a way of life that is outwardly simple, inwardly rich (revised edition).* New York: Quill.

[94] For a list, see "Edison's Companies - The Edison Papers" at http://edison.rutgers.edu/list.htm

[95] One study found that in the US senior managers work an average of 44 hours per week. In Germany senior managers work on average 38.6 hours a week and enjoy 29.7 holidays per year, while in France they work an average of 35.6 hours per work and take 32.3 holidays per year. Bloom, N., Dorgan, S., Dowdy, J., Van Reenen, J. & Rippin, T. (2005). Management practices across firms and nations. *Working Paper*, Centre for Economic Performance, London School of Economics.

[96] Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Sciences of the United States of America,* 107(38): 16489–16493.

[97] See research reviewed in Dyck & Schroeder (2005) – especially Kasser, T. (2003). *The high price of materialism.* Cambridge, Mass.: Bradford Book, MIT Press. A materialist-individualist lifestyle may contribute to lower satisfaction with life (Burroughs, J. E., & Rindfleisch, A. (2002). Materialism and well-being: A conflicting values perspective. *Journal of Consumer Research*, 29: 348-370), poorer interpersonal relationships (Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research,* 19: 303-316), an increase in mental disorders (Cohen, P., & Cohen, J. (1996). *Life values and adolescent mental health*. Mahway, New Jersey: Erlbaum), environmental degradation (McCarty, J. A., & Shrum, L. J. (2001). The influence of individualism, collectivism, and locus of control on environmental beliefs and behavior. *Journal of Public Policy and Marketing,* 20(1): 93-104) and social injustice (Rees, W. E. (2002). Globalization and sustainability: Conflict or convergence? *Bulletin of Science, Technology and Society*, 22(4): 249-268). An important exception is for the very poorest among us, for whom materialism is positively correlated with well-being and life-satisfaction.

Endnotes for Chapter 3

[1] This case is based on a variety of sources, including Keegan, P. (2015). Here's what really happened at that company that set a $70,000 minimum wage. *Inc*. https://www.inc.com/magazine/201511/paul-keegan/does-more-pay-mean-more-growth.html; Murray, R. (2016, Aug 16). Gravity Payments' $70K minimum salary: CEO Dan Price shares result over a year later. *Today*. http://www.today.com/money/gravity-payments-70k-minimum-salary-ceo-dan-price-shares-results-t101678; Bishop, T. (2016, Feb 9). Filing reveals Gravity Payments' CEO pay and internal financial results. *GeekWire*. https://www.geekwire.com/2016/court-filing-reveals-gravity-payments-ceos-pay-and-companys-financials/. http://www.nbcnews.com/nightly-news/video/seattle-ceo-announces-70-000-minimum-wage-to-employees-427977795884; (2014, April 4). Seattle CEO announces $70,000 'minimum wage' to employees, *NBC News*. http://www.nbcnews.com/nightly-news/video/seattle-ceo-announces-70-000-minimum-wage-to-employees-427977795884. All quotations are from Keegan (2015), unless otherwise noted.

[2] http://content.time.com/time/magazine/article/0,9171,2019628,00.html https://www.forbes.com/sites/dandiamond/2015/10/12/angus-deaton-who-just-won-nobel-prize-thinks-a-75000-salary-makes-you-perfectly-happy/#5626d8d97775

[3] Cited in Bishop (2016). https://www.geekwire.com/2016/court-filing-reveals-gravity-payments-ceos-pay-and-companys-financials/; https://www.geekwire.com/2016/court-filing-reveals-gravity-payments-ceos-pay-and-companys-financials/.

[4] Recall from chapter 2 that the social construction of reality *occurs when something is perceived as an objective reality (e.g., a $100 bill), and people allow it to shape their subsequent thinking and action, even though its meaning has been created by humans and must be constantly recreated by humans in order to exist.*

[5] See further discussion of capitalism in chapter 2. Bell, D. (2002). Polanyi and the definition of capitalism. In J. Ensminger (ed.), *Theory in Economic Anthropology, 18*, 119-134.

[6] In the "varieties of capitalism" literature, what we here call documentational capitalism is often called Liberal Market Economics, and what we call relational capitalism is called Coordinated Market Economics. Our discussion draws from an excellent review of the literature by Hall, P.A., & Soskice, D. (2001). An introduction to varieties of capitalism. In P.A. Hall and D.W. Soskice (eds.) *Varieties of capitalism: The institutional foundations of comparative advantage* (chapter 1, pp. 1-68): Oxford, UK: Oxford University Press.

[7] This is consistent with findings vis a vis the relationship between CSR and varieties of capitalism. Carnevale, C., & Mazzuca, M. (2014). Sustainability report and bank valuation: evidence from European stock markets. *Business Ethics: A European Review*, *23*(1): 69-90.

[8] This table is based on information found in Hall & Soskice (2001).

[9] Aristotle's Greek word for what we call economics is *chrematistics*, and acquisitive economics is akin to "unnatural *chrematistics*", and sustenance economic is akin to "natural *chrematistics*." See Stahel, A.W. (2006). Complexity, oikonomia and political economy. *Ecological Complexity*, 3(4): 369-381. Wilson, D.J. (2005). The growth syndrome: Economic destitution. *Future Times*, 4: 3-5.

[10] This idea of "self-interest with guile" is associated with the Oliver Williamson's transaction cost theory, and opportunistic self-interest with agency theory, two of the leading schools of economic thought in management (see pages 112 and 118 in Barney, J.B.,& Hesterly, W. (1999). Organizational economics: Understanding the relationship between organizations and economic analysis. In S.R. Clegg & C. Hardy (eds) *Studying organization: Theory & method* (Chapter 4: 109-141). London: Sage. See also Ferraro, F., Pfeffer, J., & Sutton, R.I. (2005). Economic language and assumptions: How theories can become self-fulfilling. *Academy of Management Review*, 30(1): 8-24.

[11] The word Aristotle used for sustenance economics is *oikonomia*. See Hawken, 1993; Stahel, A.W. (2006) "Complexity, oikonomia and political economy." *Ecological Complexity*, 3(4): 369-381. Wilson, D.J. (2005) "The growth syndrome: Economic destitution." *Future Times*, 4: 3-5. This discussion draws from Dyck, B. (2013). *Management and the Gospel: Luke's radical message for the first and twenty-first centuries.* New York: Palgrave-Macmillan and from Dyck, B., & Neubert, M. (2010). *Management: Current practices and new directions*. Boston MA: Cengage/Houghton Mifflin.

[12] The three figures in this chapter were inspired by Daly, H., (1991). *Steady state economics*. Island Press, Washington.

[13] What Martin Buber called treating one another as "thous" rather than "its." Buber, M. (1970). *I and thou* (W. Kaufmann, Trans.). New York: Scribner.

[14] Kacperczyk, M., Nosal, J. B., & Stevens, L. (2014). *Investor sophistication and capital income inequality* (No. w20246). National Bureau of Economic Research.

[15] Note that we prefer the more descriptive language of "high-income" and "low-income" countries—rather than the more commonly-used evaluative terms of "developed" versus "developing" countries—because we recognize that people living in a low-income country are more likely to live within the earth's ecological carrying capacity and, in so doing, they may actually be viewed as more "developed" than a "high-income" country with wasteful lifestyles that use up resources beyond the carrying capacity of the earth.

[16] Here number of jobs refers to number of employed persons. See website: http://www.tradingeconomics.com/united-states/employed-persons

[17] Mishel, L, Gould, E. & Bivens, J. (2015, Jan 6). Wage stagnation in nine charts. *Economic Policy Institute*. http://www.epi.org/files/2013/wage-stagnation-in-nine-charts.pdf

Part of the explanation for this lack of wages may come from the outer loop in Figure 3. While their increased productivity may not be evident in workers' wages, perhaps it is evident in their stocks and bonds, mutual funds, pensions funds and so on. However, it is clear that this does not account for everything: "Depending on how you calculate it, the wage premium in the financial sector accounts for 15% to 25% of the overall increase in economic inequality in America since 1980." Mukunda, G. (2014). The price of Wall Street's power. *Harvard Business Review*, *92*(6), 70-+.

[18] "Annual compensation is computed using the "options realized" compensation series for CEOs at the top 350 U.S. firms ranked by sales. Typical worker compensation is average compensation of production/nonsupervisory workers in the key industries of the firms included in the sample." http://www.epi.org/files/2013/wage-stagnation-in-nine-charts.pdf01/01

[19] Brady, M. & Drew, D. (2014). Hiring the unemployable. TedTalk found Feb. 22, 2017 at https://www.youtube.com/watch?v=XIHnIGKfKaI

[20] Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone Publishing.

[21] Wilkinson, R.G. & Pickett, K. (2010). *The spirit level: Why equality is better for everyone.* London: Penguin Books. Also, whereas TBL is concerned about job stress because it causes absenteeism and turnover and thus lowers a firm's financial performance, SET is concerned about job stress because research shows that the children of parents with high job stress are more likely to commit suicide.

[22] Neal, J. (2006). *Edgewalkers: People and organizations that take risks, build bridges, and break new ground*. Westport, CT: Greenwood Publishing Group. Fry, L. W., Matherly, L. L., & Ouimet, J. R. (2010). The spiritual leadership balanced scorecard business model: The case of the Cordon Bleu-Tomasso Corporation. *Journal of Management, Spirituality and Religion*, *7*(4): 283-314.

[23] Research by New American Dream says fewer hours and less money can increase happiness. https://www.newdream.org

[24] Zeng, Z., & Honig, B. (2017). Can living wage be a win-win policy? A study of living wage effects on employer and employee performance in Hamilton, Canada. In R. Phillips & C. Wong (eds.), *Handbook of community well-being research* (pp. 575-592). Netherlands: Springer.

[25] Sosnaud, B. (2016). Living wage ordinances and wages, poverty, and unemployment in US cities. *Social Service Review*, *90*(1): 3-34.

[26] Mishel, L, Gould, E. & Bivens, J. (2015, Jan 6). Wage stagnation in nine charts. *Economic Policy Institute*. http://www.epi.org/publication/charting-wage-stagnation/

[27] "So we looked at intra-financial sector lending as a share of total lending from 1950 to 2010 and we found that, from 1950 up to around 1980 or so, they were only doing about 10% of total lending to each other. Just before the crisis in 2008 or so, they were doing almost 30% of all lending to each other. This lending to each other really was a way of providing finance for derivatives trading and other kinds of betting, rather than financing real investment." Epstein, G. (2015, July). From boring banking to roaring banking. *Dollars and sense*. http://www.dollarsandsense.org/archives/2015/0715epstein.html

[28] These crippling and sometimes life-changing currency devaluations were more the result of decisions made by money managers in large international organizations than of objective factors. See page 52 in Martin, H.-P. & H. Schumann (1997). *The global trap: Globalization and the assault on democracy and prosperity.* (Translated by P. Camiller.) Montreal: Black Rose Books. Martin and Schumann, 1997. See also pages 141-146 in Soros, G. (1998). The crisis of global capitalism. New York, NY: Public Affairs.

[29] Maverick, J.B. (2015, May 27). How big is the derivatives market? http://www.investopedia.com/ask/answers/052715/how-big-derivatives-market.asp

[30] O'Neill, D. (2014, June 13). The economics of enough: Dan O'Neill at TEDxOxbridge. https://www.youtube.com/watch?v=WIG33QtLRyA

[31] The original quote comes from Henry Wallich, of the USA Federal Reserve, and was quoted O'Neill (2014).

[32] Cline, E. (2012). *Overdressed: The shockingly high cost of cheap fashion*. New York: Penguin Portfolio. http://www.overdressedthebook.com/fashion-fast-facts/. Note these are U.S. data.

[33] See Alexander, S. & Ussher, S (2012). The Voluntary Simplicity Movement: A multi- national survey analysis in theoretical context. *Journal of Consumer Culture,* 12:66-86. Brown, K.W. & Kasser, T (2005). Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Social Indicators Research* 74: 349-68. Jackson, T. (2005). Live better by consuming less? Is there a double dividend in sustainable consumption? *Journal of Industrial Ecology* 9: 19-36. Kasser, T. (2009). Psychological need dissatisfaction, personal well-being, and ecological sustainability. *Ecopsychology* 1: 175. Walther, C. S., Sandlin, J. A., & Wuensch, K. (2016). Voluntary Simplifiers, spirituality, and happiness. *Humanity & Society*, *40*(1): 22-42.

[34] O'Neill (2014).

[35] For more on de-growth, see Washington, H. (2014). Economic sustainability: what should it be?. *Opportunities for the Critical Decade: Enhancing well-being within Planetary Boundaries*.

[36] United States Corporation Profits, 1950-2017. *Trading Economics.* http://www.tradingeconomics.com/united-states/corporate-profits

[37] World GDP, 20 countries and regional total, 1-1998 A.D. http://www.theworldeconomy.org/MaddisonTables/MaddisontableB-18.pdf

[38] Mukunda (2014).

[39] Mukunda (2014).

[40] While this may be generally true, there are factors that make it more true for some organizations than for others. Dixon-Fowler, H. R., Slater, D. J., Johnson, J. L., Ellstrand, A. E., & Romi, A. M. (2013). Beyond "does it pay to be green?" A meta-analysis of moderators of the CEP–CFP relationship. *Journal of Business Ethics*, *112*(2): 353-366. Proponents of TBL may find it noteworthy that corporate profits in the USA showed modest growth from 1950 to 1990 (from $15 billion to $250 billion), and then grew much more rapidly from 1990 to the present (from $250 billion to $1,500 billion). Of course, it is not at all clear that the recent increased growth rate of profits is related to an increased emphasis on TBL management during these years.

[41] Costanza, R., Hart, M., Talberth, J., & Posner, S. (2009). Beyond GDP: The need for new measures of progress. *The Pardee Papers*. Boston University. https://www.bu.edu/pardee/files/documents/PP-004-GDP.pdf

[42] Redefining progress: The nature of economics. *Genuine Progress.* http://rprogress.org/sustainability_indicators/genuine_progress_indicator .htm

[43] Mukunda (2014).

[44] See company website: https://www.everlane.com

[45] Rifkin, J. (1995) *The end of work.* New York: F.P. Putnam's Sons.
[46] Cline (2012).

[47] In terms of actual numbers of people living in poverty, the numbers are 1.44 billion in 1910, 2.21 billion in 1970, 1.96 billion in 1990, and 705 million in 2014. International dollars account for inflation and that

different countries have different price levels, so that each international dollar should buy roughly the same amount of goods & services in different countries. It draws on PPP (Purchasing Power Parity) exchange rates between countries. For example, in 2011 GDP/capita in India was about $1,500 on US market dollars, but about $6,000 in international dollars. Roser, M., & Ortiz-Ospina, E. (2017). Global extreme poverty. *Published online at OurWorldInData.org.* Retrieved January 31, 2017 at https://ourworldindata.org/extreme-poverty/. About 40 percent of the world, 2.6 billion people, live on less than $2 a day. News release date April 15 (2007) "poverty drops below 1 billion, says World Bank" found September 21, 2007 at http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:21299914~pagePK:64257043~piPK:437376~theSitePK:4607,00.html

[48] Narayan, D. (with R. Patel, K. Schafft, A. Rademacher, & S. Koch-Schulter) (1999). *Can anyone hear us?: Voices from 47 countries.* Poverty Group, World Bank.

[49] See Worldwide Accredited Responsible Production website at http://www.wrapcompliance.org

[50] Huq, F. A., Chowdhury, I. N., & Klassen, R. D. (2016). Social management capabilities of multinational buying firms and their emerging market suppliers: An exploratory study of the clothing industry. *Journal of Operations Management*, *46:* 19-37.

[51] Hawn, O., Chatterji, A., & Mitchell, W. (2016). How Do Financial Markets Value Corporate Social Responsibility? Investor Perceptions of Additions and Deletions by the Dow Jones Sustainability Index. Available at SSRN: https://ssrn.com/abstract=2418300 or http://dx.doi.org/10.2139/ssrn.2418300

[52] Smith, O. (2016, April 25). Inside secretive iPhone factory with safety nets 'to stop workers killing themselves'. *Express.* http://www.express.co.uk/news/uk/664296/secretive-iPhone-factory-safety-nets-stop-suicides-Apple-Petagron

[53][53] Our definition of fair trade is adapted from TransFair USA and TransFair Canada web-sites (found June 20/06 at http://www.transfairusa.org/content/about/overview.php and http://www.transfair.ca/en/fairtrade/)

[54] See WFTO website, http://www.wfto.com/about-us/vision-and-mission

[55] While these are the principles fair trade espouses to, it is not unusual in practice for a financial bottom-line perspective to compromise those principles: Reinecke, J. & Ansari, S. (2015). What is a "fair" price? Ethics as sensemaking. *Organization Science,* 26(3): 867-888. Griffiths, P. (2012). Ethical objections to fairtrade. *Journal of Business Ethics*, *105*(3), 357-373.

[56] No author, (2016, June 6). Global profits, and peril, from child labor. *Human Rights Watch.* https://www.hrw.org/news/2016/06/06/global-profits-and-peril-child-labor

[57] Smithers, R. (2014, Sept 3). Global Fairtrade sales reach £4.4bn following 15% growth during 2013. *The Guardian.* https://www.theguardian.com/global-development/2014/sep/03/global-fair-trade-sales-reach-4-billion-following-15-per-cent-growth-2013

[58] Biron, C.L. (2014). Global agricultural subsidies near $500b, favoring large- scale producers. *Mint Press News.* http://www.worldwatch.org/system/files/MintPress-AgSubsidiesVSO-032014.pdf

[59] Gross World Product: 1950-2011: Found January 31, 2017 at www.earth-policy.org/datacenter/xls/indicator2_2012_01.xls

[60] No author, (2017, March 13). Ten years of M-PESA transforming lives. *BizTechAfrica.* http://www.biztechafrica.com/article/ten-years-m-pesa-transforming-lives/12273/

Quartz Medi (June 31, 2017). Safaricom planning to expand M-Pesa mobile money across Africa. http://www.myjoyonline.com/business/2017/May-31st/safaricom-planning-to-expand-m-pesa-mobile-money-across-africa.php

[61] Vagelos, P.R. (2001). Social benefits of a successful biomedical research company: Merck. *Proceedings of the American Philosophical Society*, 145(4): 575-578.
[62] These figures are for Fairtrade International certified sales, reported in Table 2.1 in Raynolds, L. T., & Bennett, E. A. (Eds.). (2015). *Handbook of research on Fair Trade*. Edward Elgar Publishing.

[63] Cater, J. J., Beal, B. D., & Collins, L. A. (2016). The changing paradigm of fair trade social entrepreneurship in the United States. *Management Decision*, *54*(7): 1732-1756.

[64] For example, between 1960 and 1980 the wealthiest 1 percent of the U.S. population increased its wealth 150 times faster than the bottom 99 percent (Hawken, 1993: 136). In different terms, whereas in 1970 the richest 10 percent of the world owned 19 times more than the poorest 10 percent, by 1997 the ratio had increased to 27:1 (Rees, 2002).

[65] Even the World Bank, a champion of FBL globalization and market reforms, could not find convincing evidence regarding benefits of market reforms for reducing poverty. See page 5 in Stiglitz, J. (2002). *Globalization and its discontents*. New York: W.W. Norton & Company.

[66] See pages 10-22 in Stiglitz (2002).
[67] Page 10 in Hawken, P. (1993). *The ecology of commerce: A Declaration of Sustainability*, NY: HarperBusiness.

[68] This was in the Doha Round. Q&A: Troubled global trade talks. (2016, July). BBC News. http://news.bbc.co.uk/2/hi/business/5209996.stm

Adding insult to injury, instead of encouraging today's low-income countries to protect and nurture their emerging economies, institutions such as the World Trade Organization and World Bank have often required that low-income countries lower their protectionist walls, ostensibly so that they can learn how to compete in the international marketplace. The World Bank's position is consistent with economists who argue that protectionist tendencies in North America in the 1700's and 1800's actually inhibited their economic growth.

[69] See pages 101-134 in Soros, G. (1998). *The crisis of global capitalism.* New York: Public Affairs.

[70] See International Monetary Fund website: http://www.imf.org

[71] Matthews, D. (2016). UK Monopoly Capitalism: Applying a North American Brand to Britain. *Monthly Review*, *68*(3): 98-112. https://monthlyreview.org/2016/07/01/uk-monopoly-capitalism-applying-a-north-american-brand-to-britain/

[72] Hickel, J. (2016, April 8). Global inequality may be much worse than we think. *The Guardian.* https://www.theguardian.com/global-development-professionals-network/2016/apr/08/global-inequality-may-be-much-worse-than-we-think

[73] Ortas, E., Álvarez, I., & Garayar, A. (2015). The environmental, social, governance, and financial performance effects on companies that adopt the United Nations Global Compact. *Sustainability*, *7*(2): 1932-1956.

The UN launched its Global Compact in 2000, an initiative with the aim of making the process of globalization more inclusive. A wide variety of organizations (including businesses, governments, labor and civil society) have voluntarily joined the Global Compact. Its dual mission is to create networks where participants internalize values that pay particular attention to the world's poorest people, and to facilitate co-operation and collective problem-solving between different groups of stakeholders. Many firms have found that their participation in the Compact has resulted in revenue enhancements and/or cost savings. For example, the Tata Group (India's largest private sector business group, with about 100 companies in various sectors operating in 40 countries) and Gerling (a leading insurance company from Germany) have identified improvements in customer relations, staff commitment and satisfaction. Kell, G. (2003). The Global Compact: Origins, operations, progress, challenges. *Journal of Corporate Citizenship*, 11: 35-49.

[74] The World Bank has two institutions: 1) the International Bank for Reconstruction and Development (IBRD), which focuses on middle-income and developing countries that have been deemed credit-worthy,

and 2) the International Development Association (IDA), which focuses on the poorest countries in the world. Much of the information in this paragraph is taken from http://web.worldbank.org

[75] Mbithe, P., Mwabu, G., & Awiti, M. M. (2017). Impact of structural adjustment programs on agricultural sector growth in Kenya. *Journal of Agricultural Policy*, *2*(1), 1-33.

[76] Martin & Schumann (1997).

[77] Stanton, E. A. (2011). Negishi welfare weights in integrated assessment models: the mathematics of global inequality. *Climatic Change*, *107*(3-4): 417-432. We thank Ashera Bock for alerting us to Negishi welfare weights.

[78] Martin and Schumann (1997: 83).

[79] O'Mahony, P. (2017, June). Socially responsible investing: who's getting the benefit? *The Irish Times.* http://www.irishtimes.com/business/personal-finance/socially-responsible-investing-who-s-getting-the-benefit-1.3108559

[80] Trinks, P. J., & Scholtens, B. (2017). The opportunity cost of negative screening in socially responsible investing. *Journal of Business Ethics*, *140*(2): 193-208.

[81] Trinks & Scholtens (2017), O'Mahony (2017).

[82] Turing Pharmaceuticals CEO Martin Shkreli speaks to CBS News. ttps://www.youtube.com/watch?v=euLFAHkMXF4

[83] Morgenson, G. (2016, Sept). EpiPen price rises could mean more riches for Mylan Executives. *New York Times.* https://www.nytimes.com/2016/09/04/business/at-mylan-lets-pretend-is-more-than-a-game.html?emc=edit_th_20160904&nl=todaysheadlines&nlid=50700384&_r=0

[84] Thomas, K. (2016, Aug). Painted as EpiPen villain, Mylans chief says she's no such thing. *New York Times.* https://www.nytimes.com/2016/08/27/business/painted-as-a-villain-mylans-chief-says-shes-no-such-thing.html?action=click&contentCollection=Business%20Day&module=Trending&version=Full&region=Marginalia&pgtype=article

[85] Though Mylan notes that most people, thanks to discounts or coupons or insurance, pay less than $100. Duhigg, C. (2017, June). Outcry over EpiPen hasn't made them lower. *New York Times.* https://www.nytimes.com/2017/06/04/business/angry-about-epipen-prices-executive-dont-care-much.html

[86] Morgenson, G. (2016).

[87] Fitz, N. (2015, March 31). Economic inequality. It's far worse than you think. *Scientific American.* http://www.scientificamerican.com/article/economic-inequality-it-s-far-worse-than-you-think/

[88] Ciuchta, M. P., & O'Toole, J. (2016). Buy local? Organizational identity in the localism movement. *Business & Society*, 0007650316648642. McCaffrey, S. J., & Kurland, N. B. (2015). Does "local" mean ethical? The US "buy local" movement and CSR in SMEs. *Organization & Environment*, *28*(3), 286-306. For a more hands-on discussion, see Sacks, J. (2002). *The money trail: Measuring your impact on the local economy using LM3.* New Economics Foundation. http://www.i-r-e.org/bdf/docs/a002_the-money-trail_impact-on-local-economy.pdf

[89] For more on this general topic, see Carolan, M. (2014). *Cheaponomics: The High Cost of Low Prices*. Routledge. Carolan goes on to add that, whereas a new job for a clerk in a locally owned retailer might create another .6 jobs in a community (e.g., because employed people use their income to pay for things like haircuts, groceries, and car repair), a new higher-paying or professional job in a locally-owned business can create the equivalent of 1.0 or more additional job in that community. Carolan (2014) reviews several studies, and findings range from .48 to .78 to 1.02 to 3.

Endnotes for Chapter 4

[1] Based on personal interviews with Dan and Wilma Wiens, as well as Dyck, B. (1997). Build in sustainable development and they will come: A vegetable field of dreams. *British Food Journal*, 99 (9): 325-335. (Note: published in 1994 in *Journal of Organizational Change Management*.) Dyck, B. (1994). From airy-fairy ideals to concrete realities: The case of Shared Farming. *Leadership Quarterly*, 5: 227-246.

[2] See page 214 in Hawken, P. (1993). *The ecology of commerce: A declaration of sustainability.* New York, NY: HarperBusiness. See also http://www.worldwatch.org/node/755; and Fiedler, D. (2003). Quantifying our children's necessity for nature. *Conservation Biology*, 17 (2):643-644, review of Kahn, P.H. Jr., & Kellert, S.R. (2002). *Children and nature: Psychological, sociocultural, and evolutionary investigation*. Cambridge, MA: MIT Press.

[3] This is an estimate for using no-till practices in farming: Franzluebbers, A. J. (2004). Tillage and residue management effects on soil organic matter. In Magdoff, F. & Weil, R.R. (Eds.) *Soil organic matter in sustainable agriculture,* (pp 227-268). Boca Raton, FL: CRC Press. Cited in Kremen, C., & Miles, A. (2012). Ecosystem services in biologically diversified versus conventional farming systems: Benefits, externalities, and trade-offs. *Ecology and Society,* 17(4): 40-65.

[4] CA has three pillars. First, soil is covered with vegetation (e.g., the unused stalk of crops) during the non-growing season, which protects it from wind erosion; decomposition also adds nutrients to soil. Continual soil cover with vegetation (living and dead) also provides a sustained food source for organisms living in the soil. Second, crop rotation is practiced so that, for example, a season of growing corn (which uses a lot of nitrogen from the soil) is followed by two seasons of growing legumes (which add nitrogen to the soil). Crop rotation also provides a break in persistent soil borne plant diseases. Third, the land is not plowed because plowing causes growth-enhancing carbon to leave the soil and enter the atmosphere. This no-till practice helps to sequester as much as one-third of a tonne of carbon per hectare in the soil. Franzluebbers, A.J. (2004). Tillage and residue management effects on soil organic matter. In Magdoff, F. & Weil, R.R. (Eds.) *Soil organic matter in sustainable agriculture,* (pp 227-268). Boca Raton, FL: CRC Press. Cited in Kremen, C., & Miles, A. (2012). Ecosystem services in biologically diversified versus conventional farming systems: benefits, externalities, and trade-offs. *Ecology and Society* 17(4): 40-65.

[5] Locke, H. (2015, July 27). Smallholder farmers are the new global food frontier. *Huffington Post*. http://www.huffingtonpost.com/hugh-locke/smallholder-farmers-are-t_b_7865848.html

[6] FAO (2013). *The state of food and agriculture: Food systems for better nutrition*. Rom: Food and Agriculture Organization (FAO), United Nations.

[7] Steffen, W., Richardson, K., Rockström, J., Cornell, S.E., Fetzer, I., Bennett, E.M., ... & Folke, C. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, *347*(6223), 1259855: 736-746.

[8] Trebeck, K. (2015). Building back better: Business contributing to a new economic paradigm. *IDS Bulletin*, 46(3): 93-107.

[9] Steffen, W., Broadgate, W., Deutsch, L., Gaffney, O., & Ludwig, C. (2015). The trajectory of the Anthropocene: the great acceleration. *The Anthropocene Review*, 2(1): 81-98. Angus, I. (2016). *Facing the Anthropocene: Fossil capitalism and the crisis of the Earth system*. New York, NY: Monthly Review Press.

[10] The US Environmental Protection Agency and the European Environment Agency provide a similar definition ("The complex of atmospheric, geological and biological characteristics found in an area in the absence of artifacts or influences of a well developed technological, human culture.") See website (Accessed 2006, Aug 2): http://oaspub.epa.gov/trs/trs_proc_qry.navigate_term?p_term_id=4910&p_term_cd=TERM

[11] Wackernagel, M., Schulz, N. B., Deumling, D., Linares, A. C., Jenkins, M., Kapos, V., ... & Randers, J. (2002). Tracking the ecological overshoot of the human economy. *Proceedings of the National Academy of Sciences*, *99*(14), 9266-9271.

[12] Galli, A., Lin, D., Wackernagel, M., Gressot, M., Winkler–Global, S., & Network, F. (2016). Humanity's growing ecological footprint: sustainable development implications. *Brief for GSDR 2015*, United Nations. https://sustainabledevelopment.un.org/content/documents/5686humanitysgrowingecologicalfootprint.pdf

[13] Toth, G., & Szigeti, C. (2016). The historical ecological footprint: From over-population to over-consumption. *Ecological Indicators*, 60: 283-291.

Moore, J., & Rees, W.E. (2013). Getting to one-planet living. In Worldwatch Institute, *State of the World 2013: Is Sustainability Still Possible?,* 4: 39-50. Washington, D.C: Island Press.

[14] Galli et al (2016).

[15] 76% is industrial waste, 18% is special waste, 3.5% is construction and demolition waste, and < 3% is garbage (municipal solid waste). Leonard, A. (2013). Moving from individual change to societal change. Chapter 23 in *State of the World 2013: Is Sustainability Still Possible?* Worldwatch Institute, (pp 244-252).

[16] Kiron, D., Kruschwitz, N., Rubel, H., Reeves, M. & Fuisz-Kehrback, S.K. (2013). Sustainability's next frontier: Walking the talk on the sustainability issues that matter most: Findings from the 2013 Sustainability & Innovation Global Executive Study and Research Project. *MIT Sloan Management Review*, December: 1-26.

[17] Tan, C.E., Kyriss, T., & Glantz, S.A. (2013). Tobacco company efforts to influence the food and drug administration-commissioned Institute of Medicine report Clearing the Smoke: an analysis of documents released through litigation. *Public Library of Science Medicine*, 10(5): e1001450. Schick, S., & Glantz, S. (2005). Scientific analysis of second-hand smoke by the tobacco industry. *Nicotine Tobacco Research,* 7: 591-612.

[18] See website: http://www.epa.gov/compliance/resources/cases/civil/caa/willamette.html

[19] Hozik, M. (2016, Feb 1). Making the green going green: Increased demand for green products and the FTC's role in a greener future. *Georgetown Environmental Law Review.* https://gelr.org/2016/02/01/making-the-green-by-going-green-increased-demand-for-green-products-and-the-ftcs-role-in-a-greener-future-georgetown-environmental-law-review/

[20] For more information on sustainable marketing, see Martin & Schouten (2012).

[21] "In a recent barrage of public letters and full-page ads, Fortune 100 companies are voicing strong support for remaining in the Paris accord. The breadth of this coalition is remarkable: industries from oil and gas to retail, mining, utilities, agriculture, chemicals, information and automotive. This is as close as big business gets to a consensus position. … American business leaders understand that remaining in the agreement would spur new investment, strengthen American competitiveness, create jobs, ensure American access to global markets and help reduce future business risks associated with the changing climate. Leaving Paris would yield the opposite." Shultz, G.P., & Halstead, T. (2017, May 9). The business case for the Paris Climate Accord. *New York Times.* https://www.nytimes.com/2017/05/09/opinion/the-business-case-for-the-paris-climate-accord.html?emc=edit_th_20170509&nl=todaysheadlines&nlid=50700384

[22] Ideas in the paragraph are taken from Klok, J., Larsen, A., Dahl, A. & Hansen, K. (2006). Ecological tax reform in Denmark: History and social acceptability. *Energy Policy*, 34: 905-916; Hawken, 1993; Hawken, P., Lovins, A., & Lovins, L. H. (1999). *Natural capitalism: Creating the next Industrial Revolution*. Boston: Little, Brown; Martin & Schumann (1997: 160).

[23] Some businesses and individuals already voluntarily pay for "carbon offsets" to account for their use of fossil fuels—green taxes would ensure that everyone pays for the ecological damage that their actions cause.

[24] Underwood, A. (2007, Aug 20-27). The green campus: How to teach respect for the environment? The three R's: reduce your carbon footprint, reuse and recycle. *Newsweek*. Found August 2, 2017 athttp://www.fundee.org/news/policy/20070820.htm

[25] Friedman, T.L. (2005). *The world is flat: A brief history of the twenty-first century*. New York, NY: Farrar, Straus and Giroux.

[26] Shrivastava, P. & Kennelly, J.J. (2013). Sustainability and place-based enterprise. *Organization & Environment,* 26(1): 83-101.

[27] Shrivastava & Kennelly (2013). McCaffrey, S.J., & Kurland, N.B. (2015). Does "local" mean ethical? The US "buy local" movement and CSR in SMEs. *Organization & Environment*, 1086026615586795. Compared to large and multinational firms, small-and-medium sized firms are less likely to be profit-maximizers.

[28] Patel, R. (2010). *The value of nothing: How to reshape market society and redefine democracy*. New York: Picador. Sandhu, H.S., Wratten, S.D., Cullen, R., & Case, B. (2008). The future of farming: the value of ecosystem services in conventional and organic arable land. An experimental approach. *Ecological Economics*, 64(4): 835-848.

[29] Carolan, M. (2014). *Cheaponomics: The high cost of low prices*. London: Routledge.

[30] Davis, J. L., Green, J.D., & Reed, A. (2009). Interdependence with the environment: Commitment, interconnectedness, and environmental behavior. *Journal of Environmental Psychology*, 29(2): 173-180. Palomino, M., Taylor, T., Göker, A., Isaacs, J., & Warber, S. (2016). The online dissemination of nature–health concepts: Lessons from sentiment analysis of social media relating to "nature-deficit disorder." *International Journal of Environmental Research and Public Health*, 13(1), 142-164.

[31] Tsunetsugu, Y., Park, B.J., Lee, J., Kagawa, T., & Miyazaki, Y. (2011). Psychological relaxation effect of forest therapy: results of field experiments in 19 forests in Japan involving 228 participants. *Nihon eiseigaku zasshi. Japanese Journal of Hygiene*, 66(4): 670-676. Lee, J., Tsunetsugu, Y., Takayama, N., Park, B.J., Li, Q., Song, C., ... & Miyazaki, Y. (2014). Influence of forest therapy on cardiovascular relaxation in young adults. *Evidence-Based Complementary and Alternative Medicine*, Article ID 834360, 7 pages http://dx.doi.org/10.1155/2014/834360

[32] Patel (2010).

[33] Though some have argued that the transportation savings may not be as great as generally thought. Dunning, B. (2009, May 28). The fallacy of locally grown produce. *skepticblog*. http://www.skepticblog.org/2009/05/28/the-fallacy-of-locally-grown-produce/.

[34] For an excellent overview of the global carbon cycle, see: An introduction to the global carbon cycle. *University of New Hampshire*. http://globecarboncycle.unh.edu/CarbonCycleBackground.pdf

[35] Levin, D. (2012, Sept 6). Follow the carbon. *Oceanus Magazine.* http://www.whoi.edu/oceanus/feature/follow-the-carbon

[36] As noted by Stephen Hawking: "What we normally think of as 'life' is based on chains of carbon atoms, with a few other atoms such as nitrogen or phosphorous (308). … The Earth was formed largely out of the heavier elements, including carbon and oxygen. Somehow some of these atoms came to be arranged in the form of molecules of DNA." Hawking, L., & Hawking, S. (2014). *George and the unbreakable code,* (4). New York: Simon & Schuster.

[37] For a simple description of this process, see website: http://www.chem4kids.com/files/bio_metabolism.html

[38] Schwartz, J.D. (2014, March 4). Soil as carbon storehouse: New weapon in climate fight? *Envrionment360*. Accessed February 21, 2015, from http://e360.yale.edu/features/soil_as_carbon_storehouse_new_weapon_in_climate_fight

[39] Joshi, P.K. (2011). Conservation Agriculture: An overview. *Indian Journal of Agricultural Economics,* 66(1): 53-63.

[40] Over the past 300 years, about 100 million hectares of irrigated land have been destroyed and another 110 million suffer diminished productivity. Utuk, I.O., & Daniel, E.E. (2015). Land degradation: A threat to food security: A global assessment. *Journal of Environment and Earth Science, IISTE*, 5: 13-21.

[41] According to Revington, J. (World Rainforest Report), 40% of rainforests in Central America have been burned down or cleared since 1950, mostly to use for cattle pasture for the export market (often for

American hamburgers. Editors (2004; updated May 18, 2017). Is meat sustainable? *World Watch Magazine,* 17(4): 12-20. http://www.worldwatch.org/system/files/EP174A.pdf

[42] Houghton, R.A., Hobbie, J.E., Melillo, J.M., Moore, B., Peterson, B.J., Shaver, G.R., & Woodwell, G.M. (1983). Changes in the carbon content of terrestrial biota and soils between 1860 and 1980: A net release of CO2 to the atmosphere. *Ecological Monographs*, 53(3): 235-262.

[43] See page 65 in Nikiforuk, A. (2012). *The energy of slave: Oil and the new servitude*. Vancouver, BC: Greystone Books.

[44] The total market capitalization of global financial institutions is about US$4.5 trillion, while the market value of state and privately owned oil and gas firms is US$6.7 trillion. Di Muzio, T. (2016). Energy, capital as power and world order. In *The Palgrave Handbook of Critical International Political Economy,* 267-287. UK: Palgrave Macmillan.

[45] Kuhlmann, E. (2012, Feb 11). How much CO_2 produced by burning one barrel of oil. *Pyrolysium.* http://pyrolysium.org/how-much-co2-produced-by-burning-one-barrel-of-oil/

[46] As a world-wide average, about 0.4 kg of CO_2 is emitted for every US$1 of GDP, but these is quite a range in terms of efficiency among countries (e.g., France and Great Britain emit on 0.2 kg, China about .64 kg and Russia about .75 kg, and the USA about 3.6 kg). On average, about 4.9 tonnes are emitted per person annually, with USA per capita emissions over 16 tonnes, Europe and China each under 8 tonnes, and countries like Indonesia at 2 tonnes or less. Le Quéré, C., Andrew, R.M., Canadell, J.G., Sitch, S., Korsbakken, J.I., Peters, G.P., ... & Keeling, R.F. (2016). Global carbon budget 2016. *Earth System Science Data*, 8(2): 605.

[47] Boden, T.A., Marland, G., & Andres, R.J. (2010). Global, regional, and national fossil-fuel CO_2 emissions. *Carbon Dioxide Information Analysis Center*. Oak Ridge, TN: U.S. Department of Energy.

[48] Quéré et al (2016).

[49] See award-winning website. Carbon Dioxide. *NASA- Global Climate Change: Vital Signs of the Planet*. http://climate.nasa.gov/key_indicators. Note that CO_2 levels may have been as much as 1,000 parts per million in pre-human eras? Scientists believe that such levels today would make the planet unsustainable for humankind.

[50] Unnamed author(s) (2017, March 17). IEA finds CO_2 emissions flat for third straight year even as global economy grew in 2016. *International Energy Agency.* https://www.iea.org/newsroom/news/2017/march/iea-finds-co2-emissions-flat-for-third-straight-year-even-as-global-economy-grew.html

[51] Much of the information in this section is from: Carbon Dioxide. *NASA - Global Climate Change: Vital Signs of the Planet*. http://climate.nasa.gov/key_indicators. That said, some scientists are doubtful about these conclusion, and an intense debate has developed around the issue of global warming. For example, while it may be true that the 10 warmest years since 1880 have occurred in the last 15 years, there are two important facts that are omitted when this statistic is cited. First, the differences in temperatures between the 10 warmest years are usually only hundredths of a degree of change, i.e., 2003 might have been .02 of a degree warmer than 2002. This means that the average global temperature has been essentially flat since 1998, and the warming trend seems to have disappeared. Second, choosing only the years since 1880 for comparison is highly suspect on methodological grounds. Global warming and cooling has been going on for millions of years before humans appeared on the planet. In some of those early warming periods, global temperatures climbed much faster than the most recent warming, in spite of the fact that there was no human-generated carbon being put into the atmosphere. The fact is that the forces driving global warming and cooling are incredibly complex, and that we really don't understand nearly enough about them to draw firm conclusions about how CO_2 influences temperature.

[52] Viñas, M-J. (2017, March 22). Sea ice extent sinks to record lows at both poles. *NASA.* https://www.nasa.gov/feature/goddard/2017/sea-ice-extent-sinks-to-record-lows-at-both-poles

[53] "Climate change impacts global issues." United States Environmental Protections Agency. Accessed in 2015 at at website: http://www.epa.gov/climatechange/impacts-adaptation/international.html

[54] Doney, S.C., Fabry, V.J., Feely, R.A., & Kleypas, J.A. (2016). Ocean acidification: The other CO_2 problem. *Washington Journal Environmental Law & Policy*, *6*, 213. https://digital.law.washington.edu/dspace-law/handle/1773.1/1608

[55] Thompson, H. (2015, May 26). How will climate change impact plankton? *Smithsonian.com*. http://www.smithsonianmag.com/smart-news/how-will-climate-change-impact-plankton-180955387/2016. Living Planet Report 2016: Risk and resilience in a new era. *World Wildlife Fund.* https://c402277.ssl.cf1.rackcdn.com/publications/964/files/original/lpr_living_planet_report_2016.pdf?1477582118&_ga=1.148678772.2122160181.1464121326. Kirby, A. (2013, Sept 8). Plankton will suffer as oceans warm. *Climate News Network.* http://climatenewsnetwork.net/plankton-will-suffer-as-oceans-warm/

[56] "Overview of Greenhouse gases." United States Environmental Protections Agency. Accessed in 2015 at website: http://www.epa.gov/climatechange/ghgemissions/gases/co2.html

[57] DCB refers to dichlorobenzenes. See study in Tagliaferri, C., Evangelisti, S., Acconcia, F., Domenech, T., Ekins, P., Barletta, D., & Lettieri, P. (2016). Life cycle assessment of future electric and hybrid vehicles: A cradle-to-grave systems engineering approach. *Chemical Engineering Research and Design*, 112: 298-309. Another Life Cycle Assessment suggests electric cars reduce GHG emissions by almost 30%. Hawkins, T. R., Singh, B., Majeau-Bettez, G. and Strømman, A.H. (2013). Comparative environmental life cycle assessment of conventional and electric vehicles. Journal of Industrial Ecology, 17: 53–64. See also DiLallo, M. (2014, Sept 26). Why 'green' cars are still destroying the Earth. *Time Money.* http://time.com/money/3432529/tesla-electric-environmentally-friendly-aluminum/

[58] See company website: https://www.terrapass.com

[59] See website: https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle-0

[60] See website (Accessed 2007, June): http://www.tufts.edu/tie/tci/sequestration.htm.

[61] See website (Accessed 2007, June): http://earthtrends.wri.org/features/view_feature.php?theme=5&fid=53

[62] Apple claims it uses renewable sources for 96% of its energy. Pearce, F. (2017, May 15). Let's hold Apple and Walmat to their big environmental promises. *The Guardian*. https://www.theguardian.com/sustainable-business/2017/may/15/apple-walmart-environment-sustainability-targets?CMP=ema-1706&CMP=

[63] Michaelson, J. (2017, April 29). The hero of the People's climate march: Wal-Mart? *The Daily Beast*. http://www.thedailybeast.com/articles/2017/04/29/the-hero-of-the-people-s-climate-march-wal-mart

[64] Wal-Mart has recently agreed to settle a case of greenwashing (mislabeling plastic products as "biodegradable" or "compostable). Hardcastle, J.L. (2017, Feb 3). 'Greenwashing' costing Walmart $1 million. *Environmental Leader.* https://www.environmentalleader.com/2017/02/greenwashing-costing-walmart-1-million/

[65] Horowitz, J., & Mullen, J. (2017, June 2). Top CEOs tell the CEO president: You're wrong on Paris. *CNN Money*. http://money.cnn.com/2017/06/01/news/ceos-respond-trump-paris-agreement/index.html

[66] Critics point out that these solutions may create greater problems, provide a false sense of security for solving current problems, and distract people from becoming less dependent on fossil fuels. For further examples and discussion, see McIlroy, A. (2006). Going to global extremes to fight global warming. *The Globe and Mail* (June 3, A1 and A8).

[67] The information in this paragraph is drawn from pages 89-90 in Dyck, B. & Neubert, M. (2010). *Management: Current practices and new directions.* Boston MA: Cengage/Houghton Mifflin. For example, in Copenhagen, Denmark, which has almost 500 km of dedicated bicycle lanes, 56% of population commutes

to their work or place of study by bike. See website: http://www.cycling-embassy.dk/facts-about-cycling-in-denmark/statistics/

68 See website: http://organictransit.com. See also Sion car video https://www.sonomotors.com/crowdfunding/

69 Boyd, D. (2014, March 3). Enshrine our right to clear air and water in the Constitution. Policy Options. http://policyoptions.irpp.org/magazines/opening-eyes/boyd-macfarlane/

70 Cline, E. (2012). *Overdressed: The shockingly high cost of cheap fashion.* New York: Penguin Portfolio.

71 See website: https://skinnysweats.com/pages/slow-fashion. See also Leslie, D., Brail, S. & Hunt, M. (2014). Crafting an antidote to fast fashion: The case of Toronto's independent fashion design sector. *Growth and Change*, 45(2): 222-239.

72 Here is the link to the video on the "hidden price tag" on blue jeans, and which introduces the "Good Guide" app: https://www.youtube.com/watch?v=TVBxlMx6nK4. Here is a link about a social experiment with a 2 Euro t-shirt: https://www.youtube.com/watch?v=KfANs2y_frk

73 In contrast, one study suggests that the wages of sewing workers in Asian garment factories are in the range of about 50-85% of a living wage. While the cost of raising their pay to a living wage would be equivalent to, on average, a 4% increase of the final consumer price, following current industry practices the price increase would be greater because the way the supply chain works is that factory wages get "marked-up" on a percentage basis, so that a $1 increase in factory wages might result in $6 increase in consumer price. Lally, A., & Spauwen, I. (2014). Living Wage engineering. *Fair Wear Foundation.* https://www.fairwear.org/ul/cms/fck-uploaded/documents/fwfpublications_reports/LivingWageEngineering20141.pdf

74 Locke (2015).

75 Haberl, H., Erb, K.H., & Krausmann, F. (2014). Human appropriation of net primary production: patterns, trends, and planetary boundaries. *Annual Review of Environment and Resources*, 39: 363-391.

76 Agronomists and international development professionals suggest that "multifunctional agriculture" would be much more sustainable for the vast majority of the world's farmers, in particular small-scale farms in low-income countries. "Multifunctional agriculture" emphasizes innovations that are sustainable and foster biodiversity and facilitate community development, identifying Conservation Agriculture (CA) (see opening case) to be of particular importance in low-income countries. See Hurni, H. & Osman-Elasha, B. (coordinating lead authors) (2009). Context, conceptual framework, and sustainability indicators. In McIntyre, B.D., Herren, H.R., Wakhungu, J. & Watson, R.T. (Eds.) *Agriculture at the crossroads,* 1-56. Washington, DC: IAASTD. Stokstad, E. (2008). Dueling visions for a hungry world. *Science*, 319 (March 14): 1474-1476. Wood, D. & Lenne, J.M. (2011). Can the international assessment of agricultural knowledge, science and technology for development (IAASTD) approach ensure future food security? In Lenne, J.M. & Wood, D. (ed.). *Agrobiodiversity Management and Food Security: A Critical Review,* 170-188. London, UK: CAB International.

77 Bayliss-Smith, T.P. (1982). *The ecology of agricultural systems.* Cambridge, UK: Cambridge University Press. See also Dyck, B. (1994). Build in sustainable development, and they will come: A vegetable field of dreams. *Journal of Organizational Change Management*, 7 (4): 47-63.

78 Haberl, H., Erb, K.H., & Krausmann, F. (2014). Human appropriation of net primary production: patterns, trends, and planetary boundaries. *Annual Review of Environment and Resources*, 39: 363-391.

79 See page 164 in Princen, T., Manno, J.P., & Martin, P. (2013). Keep them in the ground: Ending the fossil fuel era. *State of the World 2013: Is Sustainability Still Possible?* Worldwatch Institute, 14:161-71. Note also that in pre-industrial Wiltshire 1 calorie of human energy yielded 40 calories of food energy, and today in industrial agriculture 1 calorie of human energy yields 90 calories of food energy. Garza, E. (2014, July 10). Meat vs veg: An energy perspective. *UVM Food Feed: Sustainable Foods Systems & The University of Vermont.* https://learn.uvm.edu/foodsystemsblog/2014/07/10/meat-vs-veg-an-energy-perspective/ (This section has benefitted from comments by Gary Martens, University of Manitoba).

[80] Haberl, H., Erb, K.H., & Krausmann, F. (2014). Human appropriation of net primary production: patterns, trends, and planetary boundaries. *Annual Review of Environment and Resources*, 39: 363-391.

[81] Utuk, I.O., & Daniel, E.E. (2015). Land degradation: A threat to food security: A global assessment. *Journal of Environment and Earth Science, IISTE*, 5: 13-21.

[82] Over the past 300 years, about 100 million hectares of irrigated land have been destroyed and another 110 million suffer diminished productivity (Utuk & Daniel, 2015).

[83] Annual production and hectares as follows: corn (823 billion tons, 161 million hectares; wheat (689 tones and 222 million hectares), and rice (685 billion tons from 160 million hectares). Goldschein, E. (2011, Sept 20). The 10 most important crops in the world. *Business Insider*. http://www.businessinsider.com/10-crops-that-feed-the-world-2011-9

[84] Corn, rice, wheat and soybeans account for 64% of global calories in food. Jastive-BU, K. (2014, November 20). Carbon cycle shifts as corn 'explodes'. *Futurity*. http://www.futurity.org/carbon-crops-corn-806552/

[85] Ford, A. (2008, Aug 1). King corn: Documentary film reveals how subsidized corn is driving the fast-food industry. *The Edge: Holistic Living*. http://www.edgemagazine.net/2008/08/king-corn-documentary-film-reveals-how-subsidized-corn-is-driving-the-fast-food-industry/

[86] Page 75 in Hahn Niman, N. (2014). *Defending beef: The case for sustainable meat production*. White River Junction, VT: Chelsea Green Publishing.

[87] Schechinger, A.A. (2015, June 9). Farm nitrogen pollution damage estimated at $157 billion yearly. *AgMag*. http://www.ewg.org/agmag/2015/06/farm-nitrogen-pollution-damage-estimated-157-billion-yearly. Cited in Lehner, P. (2016, Aug 16). The hidden costs of food. Huffington Post. http://www.huffingtonpost.com/peter-lehner/the-hidden-costs-of-food_b_11492520.html. Steffen et al. (2015) add that, since the discovery about a century ago of the Haber-Bosch process which creates fertilizer from atmospheric nitrogen that is unreactive, the nitrogen cycle has been altered massively in the past century and is in the danger zone. Steffen, W., Broadgate, W., Deutsch, L., Gaffney, O., & Ludwig, C. (2015). The trajectory of the Anthropocene: the great acceleration. *The Anthropocene Review*, 2(1): 81-98.

[88] Health care costs for sugar-related issues are about $1 trillion, and 7% of the global sweetener market is high fructose corn syrup. Keating, G., & Natella, S. (2013, Sept). US Sugar consumption at a crossroad. *Credit Suisse Research Institute*. https://research-doc.credit-suisse.com/docView?language=ENG&source=ulg&format=PDF&document_id=1022457401&serialid=atRE31ByPkIjEXa/p3AyptOvIGdxTK833tLZ1E7AwlQ=. See also http://www.huffingtonpost.com/peter-lehner/the-hidden-costs-of-food_b_11492520.html

[89] Kluger (2007: 49). Although there are others who argue that ethanol is actually energy efficient (e.g., see "ethanol facts" found September 21, 2007 at http://www.ethanolfacts.com/ETHL2007/quickfacts.html). Vaclav Smil, a world-renowned energy expert, argues that there are not financial savings or ecological benefits to ethanol when accounting for the amount of irrigation and fertilizer and other processing costs. Santin, A. (2006, Nov 30). Speaker attacks sacred cows. *Winnipeg Free Press*, A10.

[90] Data taken for United Nation's Food and Agriculture Organization, reported in: Unnamed author(s), (2011, July 27). Global livestock counts: Counting chickens. *The Economist*. http://www.economist.com/blogs/dailychart/2011/07/global-livestock-counts

[91] Based on the average population of 3,706 species of vertebrates on the planet (all mammals, birds, reptiles, fish and amphibians), srop in land animals was 38%. Living Planet Report 2016: Risk and resilience in a new era (2016). *World Wildlife Fund*. https://c402277.ssl.cf1.rackcdn.com/publications/964/files/original/lpr_living_planet_report_2016.pdf?1477582118&_ga=1.148678772.2122160181.1464121326

[92] Hahn Niman (2014).

[93] Biello, D. (2008, Nov 12). That burger you're eating is mostly corn. *Scientific American*. https://www.scientificamerican.com/article/that-burger-youre-eating-is-mostly-corn/

[94] Ranganathan, J., Vennard, D., Waite, R., Dumas, P., Lipinski, B., Searchinger, T. (2016). Shifting Diets for a sustainable food future. Working Paper, Installment 11 of *Creating a Sustainable Food Future*. Washington, DC: World Resources Institute. Accessible at http://www.worldresourcesreport.org. In 2004 transportation emitted 15% of global GHG emissions, and agriculture emitted 14% (IPCC, 2007).

[95] Unnamed author (no date). Are cows the cause of global warming? *Time for change*. http://timeforchange.org/are-cows-cause-of-global-warming-meat-methane-CO2. This article cites Ogino, A., Orito, H., Shimada, K., & Hirooka, H. (2007). Evaluating environmental impacts of the Japanese beef cow–calf system by the life cycle assessment method. *Animal Science Journal*, 78(4): 424-432.

[96] Simon, D.R. (2013). *Meatonomics: How the rigged economics of meat and dairy make you consume too much–and how to eat better, live longer, and spend smarter*. San Francisco, CA: Conari Press.

[97] Steffen, W., Broadgate, W., Deutsch, L., Gaffney, O., & Ludwig, C. (2015). The trajectory of the Anthropocene: the great acceleration. *The Anthropocene Review*, 2(1): 81-98.

[98] Monoculture assures that all the plants in a field will ripen at about the same time, enabling farmers to use large machinery to harvest their crops. However, monoculture also leaves crops vulnerable to a single pest, thus increasing the need for pesticides.

[99] *Living Planet Report 2016: Risk and resilience in a new era*. World Wildlife Fund. https://c402277.ssl.cf1.rackcdn.com/publications/964/files/original/lpr_living_planet_report_2016.pdf?1477582118&_ga=1.148678772.2122160181.1464121326

[100] Clark, N.E., Lovell, R., Wheeler, B.W., Higgins, S.L., Depledge, M.H., & Norris, K. (2014). Biodiversity, cultural pathways, and human health: a framework. *Trends in ecology & evolution*, 29(4): 198-204.

[101] This concentration of power has been facilitated by international trade liberalization. *Living Planet Report 2016.*

[102] Small scare farms (1-2 hectares, 84% of farms) use 12% of land (72% of farms are less than 1 hectare, and use 8% of land). *Living Planet Report 2016.*

[103] *Living Planet Report 2016.*

[104] *Living Planet Report 2016.*

[105] Food is a major part of the global economy. For example, Americans spend about 10% of their net incomes on food, which in 2014 meant US$1.5 trillion spent in grocery stores, restaurants and other places where food is sold. Lehner, P. (2016, August 15). The hidden costs of food. *Huffington Post*. http://www.huffingtonpost.com/peter-lehner/the-hidden-costs-of-food_b_11492520.html. According to The World Bank, the total net income for USA in 2015 was estimated at $15.6 trillion. http://data.worldbank.org/indicator/NY.ADJ.NNTY.CD

[106] Gunders, D. (2012, August). *Wasted: How America is losing up to 40 percent of its food from farm to fork to landfill*. NRDC Issue Paper 12-06-B. New York, NY: Natural Resources Defense Council

[107] Goodwin, L. (2017, March 6). By the numbers: The business case for reducing food loss and waste. *World Resources Institute.* http://www.wri.org/blog/2017/03/numbers-business-case-reducing-food-loss-and-waste

[108] Gunders (2012).

[109] Cummins, R. (2015, March 31). Factory farm meat: Why vegetarians, ranchers, and conscious omnivores need to unite. *Organic Transitions.* https://www.organicconsumers.org/essays/factory-farm-meat-why-vegetarians-ranchers-and-conscious-omnivores-need-unite

[110] Timmer, A.D. (2015). Place-based responses to the global food economy. *A Place-Based Perspective of Food in Society,* 203-220. New York: Palgrave Macmillan.

[111] "Beginning with the first Agricultural Adjustment Act of 1933, [US] Congress and the courts have built a safety net of statutory exclusions and economic subsidies to support what has become known as 'conventional agriculture': large-scale, highly-mechanized, monocultural plant and animal production." Page 316 in Foscolo, J., & Zimmerman, M. (2013). Alternative growth: Forsaking the false economies of industrial agriculture. *Fordham Environmental Law Review,* 25: *316.*

[112] "These include costs such as water testing, testing compost materials, installing deer fencing, building an enclosed packing house, switching to all plastic harvest bins, renting port-a-potties with hand washing stations and the most time-consuming task of endless record-keeping. The record-keeping of organic certification will pale in comparison with food safety record-keeping. Things like daily temperature checks, recording when you pump, clean, and restock your bathrooms, recording when your employees wash their hands, how many deer footprints you found in a particular field, lot numbers for every box of produce you harvest, etc." Collins, J. (2016, Apr 1). Small farms are getting regulated out of business. *In these times.* http://inthesetimes.com/rural-america/entry/19012/the-food-safety-and-modernization-act-has-consequences-for-small-farmers

[113] Weber, K., Heinze, K.L., & DeSoucey, M. (2008). Forage for thought: Mobilizing codes in the movement for grass-fed meat and dairy products. *Administrative Science Quarterly*, 53(3): 529-567.

[114] Jalonick, M.C. (2017, May 9). Ag dep't delays animal welfare standards for organic meats. *NewsOK*. http://newsok.com/ag-dept-delays-animal-welfare-standards-for-organic-meats/article/feed/1218869

[115] Goodwin (2017).

[116] These investments can come from governments and/or other stakeholders. Goodwin (2017).

[117] Baden-Mayerm, A., & Cummins, R. (2014, May 7). NOSB meeting report: Big food pushes for weaker organic standards: Consumers win on antibiotics. *Organic Consumers Association*. https://www.organicconsumers.org/essays/nosb-meeting-report-big-food-pushes-weaker-organic-standards-consumers-win-antibiotics. Besharov, M. (2017). Book review: Organizing organic: Conflict and compromise in an emerging market. *Organization Studies*, 38(2) 285–288. Review of Haedicke, M.A. (2016). *Organizing organic: Conflict and compromise in an emerging market.* Redwood City, CA: Stanford University Press. Michaelis, K. (2013). USDA guts organic standards. *Food Renegade.* http://www.foodrenegade.com/usda-guts-organic-standards/#comments

[118] Weber et al (2008).

[119] Michener, L.H. (2015). Meating America's demand: An analysis of the hidden costs of factory farming and alternate methods of food production. *Journal of Animal & Environmental Law*, 7: 145.

[120] Sandhu, H.S., Wratten, S.D., Cullen, R., & Case, B. (2008). The future of farming: The value of ecosystem services in conventional and organic arable land. An experimental approach. *Ecological Economics*, 64(4): 835-848.

[121] Tencati, A., & Zsolnai, L. (2012). Collaborative enterprise and sustainability: The case of Slow Food. *Journal of Business Ethics*, 110: 345-354.

[122] See page 346 in Tencati & Zsolnai (2012).

[123] Chaudhury, S.R., & Albinsson, P.A. (2015). Citizen-Consumer oriented practices in naturalistic foodways: The case of the Slow Food Movement. *Journal of Macromarketing*, 35(1): 36-52.

[124] McMichael, A.J. (2014). Population health in the Anthropocene: Gains, losses and emerging trends. The Anthropocene Review: 1(1):44-56.

[125] McMichael (2014).

[126] McMichael (2014).

[127] McMichael (2014).

[128] McMichael (2014).

[129] Dellorto, D. (2012, Dec 14). Global report: Obesity bigger health crisis than hunger. *CNN*. http://www.cnn.com/2012/12/13/health/global-burden-report/

[130] S (2016).

[131] 7 million premature deaths annually linked to air pollution. Ambient (outdoor) air quality and health. See Fact sheet (2016, Sept): http://www.who.int/phe/en/

[132] Velasquez-Manoff, M. (2016, Aug. 3). Health secrets of the Amish. *New York Times.* https://www.nytimes.com/2016/08/04/opinion/health-secrets-of-the-amish.html. Amish children in the USA are the least allergic subgroup ever tested in the developed world, and a key to their health may be exposure to microbes related to the nearness to living to cows.

[133] Markandya, A., Saygin, D., Miketa, D., Gielen, D., & Wagner, N. (2016). *The true cost of fossil fuels: Savings on the externalities of air pollution and climate change*. Germany: International Renewable Energy Agency.

[134] Based on figures in Markandya et. al (2016).

[135] See Fact sheet (2016), *World Health Organization*, http://www.who.int/phe/en/. About 56 million people died in 2015 http://www.who.int/mediacentre/factsheets/fs310/en/

[136] Kaplan, K. (2016, Oct 16). You can blame cigarettes for nearly 3 in 10 cancer deaths in the U.S., study says. *Los Angeles Times*. http://www.latimes.com/science/sciencenow/la-sci-sn-cancer-deaths-smoking-20161024-snap-story.html

[137] Schick S., Glantz, S. (2005). Scientific analysis of second-hand smoke by the tobacco industry. *Nicotine Tobacco Research*, 7: 591-612.

[138] Rabin, R.C. (2017, May 15). A strong case against a pesticide does not faze E.P.A. under Trump. *New York Times.* https://www.nytimes.com/2017/05/15/health/pesticides-epa-chlorpyrifos-scott-pruitt.html?emc=edit_th_20170516&nl=todaysheadlines&nlid=50700384&_r=0. Similarly, Pollan (2006) describes how about 70% of American cornfields have been treated with a pesticide called Atrazine, which has been banned in the European Union because even concentrations as low as 0.1 part per billion will chemically emasculate a male frog. Atrazine is currently present in American waterways at much higher levels than that. Pollan, M. (2006, June 4). The way we live now: Mass Natural. *New York Times.* http://www.nytimes.com/2006/06/04/magazine/04wwln_lede.html?pagewanted=1&ei=5088&en=07310c42ac1a390c&ex=1307073600

[139] Wright, L. (2017, June 11). A peek inside MacDonald's top secret convention. *The Star.* https://www.thestar.com/business/2017/06/11/exclusive-a-peek-inside-mcdonalds-top-secret-convention.html

[140] For example, according to Cherie Copithorne-Barnes, chairperson of the Canadian Roundtable for Sustainable Beef: "The reality is, as an industry, we were already doing 95% of what they asked us to, we just didn't have the reporting mechanism to really be able to demonstrate it and verify it." Wong, V. (2016, Aug 10). Beef Industry says it's largely 'sustainable' already. *Buzzfeed News.* https://www.buzzfeed.com/venessawong/is-sustainable-beef-really-a-thing?utm_term=.yfGQdVWGo#.kimjKlW4x

[141] Page 128 in Martin, D., & Schouten, J. (2012). *Sustainable Marketing.* Boston, MA: Prentice-Hall.

[142] Robbins, J. (2011, Nov 17). How bad is McDonald's food? *Huffington Post.* http://www.huffingtonpost.com/john-robbins/how-bad-is-mcdonalds-food_b_754814.html

[143] = 35,000 square kilometers. These figures include beef cattle only (to add dairy multiply by 1.66). See website: http://www.iowacorn.org/en/corn_use_education/production_and_use/, and http://www.ers.usda.gov/topics/crops/corn.aspx#.UaxROcsaySN

[144] Corn uses by far more fertilizers, herbicides, and insecticides than any other crop in the USA, making it the country's largest contributor to water pollution (Hahn Niman, 2014: 75).

[145] Tilman, D., & Clark, M. (2014). Global diets link environmental sustainability and human health. *Nature*, 515(7528): 518-522. https://www2.bc.edu/christopher-kenaley/bio3030/Tilman.pdf

[146] Nelson, M.E., Hamm, M.W., Hu, F.B., Abrams, S.A., & Griffin, T.S. (2016). Alignment of healthy dietary patterns and environmental sustainability: A systematic review. *Advances in Nutrition: An International Review Journal*, 7(6): 1005-1025.

[147] Aleksandrowicz, L., Green, R., Joy, E.J., Smith, P., & Haines, A. (2016). The impacts of dietary change on greenhouse gas emissions, land use, water use, and health: a systematic review. *Public Libraries of Science One*, 11(11): 1-16. e0165797.

[148] Richkus, W.A. (2013). Role of ecological risk assessment findings in agency decision-making regarding oyster restoration in Chesapeake Bay. *Human and Ecological Risk Assessment: An International Journal*, 19(5): 1253-1263.

[149] Unnamed authr(s), (2012). Chemicals in the environment and the health implications. *European Union*. http://ec.europa.eu/environment/chemicals/reach/pdf/publications/chemicals_health.pdf

[150] CNN Wire Staff (2010, Oct 26). Everyday chemicals may be harming kids, panel told. *CNN*. http://www.cnn.com/2010/HEALTH/10/26/senate.toxic.america.hearing/

[151] Brookshire, D., & Kaza, N. (2013). Planning for seven generations: Energy planning of American Indian tribes. *Energy Policy*, 62: 1506-1514.

[152] Hunt, R. Ortiz-Hunt, L. (2017). Entrepreneurial round-tripping: The benefits of newness and smallness in multi-directional value creation. *Management Decision*, (55): 3.

[153] Goldenberg, S. (2014, Jan 19). CO_2 emissions are being 'outsourced' by rich countries to rising economies. *The Guardian*. https://www.theguardian.com/environment/2014/jan/19/co2-emissions-outsourced-rich-nations-rising-economies

[154] Whyte, C. (2017, March 29). Western demand for goods from China killing 100 000 a year. *New Scientist.* https://www.newscientist.com/article/2126127-western-demand-for-goods-from-china-is-killing-100000-a-year/

[155] Wani, I. (2017, July 5). Photo story: How e-waste workers in Delhi jeopardise their health to earn a living. *The Wire*. https://thewire.in/132025/photo-story-the-e-waste-workers-of-delhi/. Zeng, A.Z. (2013). Coordination mechanisms for a three-stage reverse supply chain to increase profitable returns. *Naval Research Logistics (NRL)*, 60(1): 31–45.

[156] Thanks to Alberta's oil sands (an 144,000 kilometer area north of Edmonton), Canada has the third largest oil reserves in the world (173 billion barrels, behind only Venezuala and Saudi Arabia, and more than Iran and Iraq). Crane, A., & Matten, D. (2016). *Business ethics: Managing corporate citizenship and sustainability in the age of globalization (4th ed).* Oxford: Oxford University Press.

[157] One of the earliest entrepreneurs to seek to exploit the oil sands was Robert Fitzsimmons, who developed a community called Bitumount--half industrial yard, half homestead—in the 1920s and promoted 38 ways that bitumen could be used, including for road paving, therapeutic baths, and home roofing. His crews produced 60 barrels of oil a day. A serial entrepreneur named Lloyd Champion bought out Fitzsimmons in 1942, recognizing that bitumen would help to pave the Alaska highway under construction at that time. Weber, B. (2017, May 18). Back to Bitumount: How oilsands changed Alberta and Canada forever. *The Record*. https://www.therecord.com/news-story/7323882-back-to-bitumount-how-the-oilsands-changed-alberta-and-canada-forever/

[158] Verbeke, A., Osiyevskyy, O., & Backman, C.A. (2017). Strategic responses to imposed innovation projects: The case of carbon capture and storage in the Alberta oil sands industry. *Long Range Planning*.

[159] Weber, B. (2017, May).

[160] Crane & Matten (2016: 127). The Sierra Club is US's largest environmental NGO.

[161] In 2011 the oil sands used 170 cubic meters of water (equivalent to the amount used in 1.7 million households), and oil sands was contaminating Alberta lakes with toxic carcinogens. Estimates suggest that about 11 million liters of toxic waters seeps everyday from the tailing ponds (tailings are a toxic waste by-product that comes from extracting oil form bitumen). Crane & Matten (2016).

[162] Taylor, K. (2016, Sept 25). The fast-food industry is suddenly embracing an unlikely new ingredient. *Business Insider*. http://www.businessinsider.com/vegetables-trend-at-fast-food-chains-2016-9.

[163] Benedict, B. (2017, May 3). 3D printed beef can create 'more value' for farmers, says Meat & Livestock Australia. *3Ders*. http://www.3ders.org/articles/20170503-3d-printed-beef-can-create-more-value-for-farmers-says-meat-livestock-australia.html

[164] Jha, A. (2013, Aug 5). Synthetic meat: how the world's costliest burger made it on to the plate. *The Guardian*. https://www.theguardian.com/science/2013/aug/05/synthetic-meat-burger-stem-cells

[165] Kolodny, L. (2017, May 22). Impossible Foods CEO Pat Brown says EVs need to ask harder scientific questions. *Techcrunch*. https://techcrunch/2017/05/22/impossible-foods-ceo-pat-brown-says-vcs-need-to-ask-harder-scientific-questions.

[166] Taylor (2016).

[167] Belko, M. (2017, June). Freshii, a healthy fast food chain, will open doors in Pittsburgh. *Post-Gazette.* http://www.post-gazette.com/life/dining/2017/06/16/freshii-pittsburgh-union-trust-building-restaurants-downtown-healthy-fast-food-chains/stories/201706160084

[168] Roberts, M. (2017, June 16). Seductive names make vegetables more appealing. *BBC.* http://www.bbc.com/news/health-40245922

[169] The description and quotations in this section are drawn from Leonard, A. (2013). Moving from individual change to societal change. Chapter 23 in *State of the World 2013: Is Sustainability Still Possible?* Worldwatch Institute, 244-52. According to its website, KAB is a $10 million charity with millions of volunteers and the mission: "To inspire and educate people to take action every day that improves and beautifies their community environment" (http://www.kab.org/site/PageServer?pagename=about_home).

[170] Page 186-187 in Martin & Schouten (2012).

[171] Jobling-Hey, A. (2012, Aug 21). Plastic water bottles and the environment: How bad is bad? *Bizenergy*. Accessed January 19, 2016 at http://www.bizenergy.ca/blog/plastic-water-bottles-and-the-environment-how-bad-is-bad/

[172] Steffen, W., Richardson, K., Rockström, J., Cornell, S.E., Fetzer, I., Bennett, E.M., ... & Folke, C. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347(6223): 1259855.

[173] Franzluebbers (2004); Kremen & Miles (2012).

[174] Zatat, N. (2017, June 3). Pesticides can cause brain damage and organic food is the future, EU report says. *Independent.* http://www.independent.co.uk/environment/environment-report-eu-pesticide-link-brain-damage-lower-iq-billions-of-pounds-lost-organic-food-a7771056.html

[175] Hickey, S. (2016, Apr 10). The innovators: Greener home insulation to feather your nest. *The Guardian.* https://www.theguardian.com/business/2016/apr/10/the-innovators-chicken-feathers-students-greener-home-insulation

[176] Giles, C. (2017, June 7). This 'tree' has the environmental benefits of a forest. *CNN.* http://www.cnn.com/2017/06/07/world/citytree-urban-pollution/

[177] Peters, A. (2017, May 30). These shoes help clean lakes – because they're made of polluting algae. *Fast Company.* https://www.fastcompany.com/40425032/these-shoes-help-clean-lakes-because-theyre-made-of-polluting-algae

Endnotes for Chapter 5

[1] Joyce, S., Modini, M., Christensen, H., Mykletun, A., Bryant, R., Mitchell, P.B., & Harvey, S.B. (2016). Workplace interventions for common mental disorders: A systematic meta-review. *Psychological Medicine*, 46(4): 683-697.

[2] Tan, L., Wang, M.J., Modini, M., Joyce, S., Mykletun, A., Christensen, H., & Harvey, S.B. (2014). Preventing the development of depression at work: a systematic review and meta-analysis of universal interventions in the workplace. *BMC medicine*, 12(1): 74. Schmidt, S., Roesler, U., Kusserow, T. & Rau, R. (2014). Uncertainty in the workplace: Examining role ambiguity and role conflict, and their link to depression—a meta-analysis. *European Journal of Work and Organizational Psychology*, 23(1): 91-106.

[3] Schermuly, C.C., & Meyer, B. (2016). Good relationships at work: The effects of leader–member exchange and team–member exchange on psychological empowerment, emotional exhaustion, and depression. *Journal of Organizational Behavior*, 37: 673–691.

[4] Castillo, L.G., & Schwartz, S.J. (2013). Introduction to the special issue on college student mental health. *Journal of Clinical Psychology*, 69(4): 291-297; Eisenberg, D., Hunt, J., & Speer, N. (2013). Mental health in American colleges and universities: variation across student subgroups and across campuses. *The Journal of Nervous and Mental Disease*, 201(1): 60-67; Ibrahim, A.K., Kelly, S.J., Adams, C.E., & Glazebrook, C. (2013). A systematic review of studies of depression prevalence in university students. *Journal of Psychiatric Research*, 47(3): 391-400; Regehr, C., Glancy, D., & Pitts, A. (2013). Interventions to reduce stress in university students: A review and meta-analysis. *Journal of Affective Disorders*, 148(1): 1-11.

[5] Byrd, D.R., & McKinney, K.J. (2012). Individual, interpersonal, and institutional level factors associated with the mental health of college students. *Journal of American College Health*, 60(3), 185-193; Wang, R., Chen, F., Chen, Z., Li, T., Harari, G., Tignor, S., Zhou, X., Ben-Zeev, D., & Campbell, A.T. (2014). Studentlife: Assessing mental health, academic performance and behavioral trends of college students using smartphones. In *Proceedings of the 2014 Association for Computing Machinery (ACM) International Joint Conference on Pervasive and Ubiquitous Computing* (pp 3-14).

These five causes of depression are related to proven ways to address depression among college students. Baghurst, T., & Kelley, B.C. (2014). An examination of stress in college students over the course of a semester. *Health Promotion Practice*, 15(3): 438-447; Conley, C.S., Durlak, J.A., & Kirsch, A.C. (2015). A meta-analysis of universal mental health prevention programs for Higher Education students. *Prevention Science*, 16(4): 487-507; Kavosi, A., Saadati, M., Movahedi, A., Farahnia, M., Mohammadi, G., Aghababayan, A., Asghari, A., & Assari, S. (2015). Physical activity enhances self-esteem of male college students: A randomized controlled trial. *International Journal of Travel Medicine and Global Health*, 3(2): 49-52; Zawadzki, M.J., Graham, J.E., & Gerin, W. (2013). Rumination and anxiety mediate the effect of loneliness on depressed mood and sleep quality in college students. *Health Psychology*, 32(2): 212.

[6] In his book *Bowling alone: The collapse and revival of American community* (Simon & Schuster), Robert Putnam writes: "'regular club attendance, volunteering, entertaining, or church attendance is the happiness equivalent of getting a college degree or more than doubling your income.' Putnam describes a number of longitudinal studies that suggest this 'rough rule of thumb, if you belong to no groups but decide to join one, you cut your risk of dying over the next year in half. If you smoke and belong to no groups, it's a toss-up statistically whether you should stop smoking or start joining." Quoted from Djordjevich, N. (2001). Should you bowl alone? *On the Page Magazine*, http://www.onthepage.org/outsiders/should_you_bowl_alone.htm

[7] Renshaw, T.L., & Cohen, A.S. (2014). Life satisfaction as a distinguishing indicator of college student functioning: Further validation of the two-continua model of mental health. *Social Indicators Research*, 117(1): 319-334.

[8] Schueller, S.M., & Parks, A.C. (2014). The science of self-help: Translating positive psychology research into increased individual happiness. *European Psychologist*, 19(2): 145–155.

[9] These three dimensions build on three human needs that have much support in the literature: growth (meaningful work), relatedness (meaningful relationships), and existence (secure access to basic essentials like food and shelter). Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance,* 4: 142–175.

[10] This framework adapts and builds on several reviews of the literature, including Rosso, B.D., Dekas, K.H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in organizational behavior*, 30: 91-127; Michaelson, C., Pratt, M.G., Grant, A.M., & Dunn, C.P. (2014). Meaningful work: Connecting business ethics and organization studies. *Journal of Business Ethics*, 121(1): 77-90. It also has overlap with Grant et al's (2007) threefold understanding of well-being including psychological well-being (e.g., meaningful work), social well-being (friendships) and physical well-being (related to physiological health). Grant, A., Christianson, M. & Price, R. (2007). Happiness, health, or relationships: Managerial practices and employee well-being tradeoffs. *Academy of Management Executive*, 21: 1, 51–63.

[11] For example, see Needleman, J. (1991). Money and the meaning of life. New York, NY: Doubleday.

[12] Rosso, B.D., Dekas, K.H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30: 91-127.

[13] Tsunetsugu, Y., Park, B.J., Lee, J., Kagawa, T., & Miyazaki, Y. (2011). Psychological relaxation effect of forest therapy: results of field experiments in 19 forests in Japan involving 228 participants. *Nihon eiseigaku zasshi: Japanese Journal of Hygiene*, 66(4): 670-676. Lee, J., Tsunetsugu, Y., Takayama, N., Park, B.J., Li, Q., Song, C., Komatsu, M., Ikei, H., Tyrväinen. L., Kagawa, T., & Miyazaki, Y. (2014). Influence of forest therapy on cardiovascular relaxation in young adults. *Evidence-Based Complementary and Alternative Medicine*. Article ID 834360, 7 pages, http://dx.doi.org/10.1155/2014/834360

[14] Dyck, B. (2015). Spirituality, virtue, and management: Theory and evidence. In Grassl, W. (section ed.) Virtues and Workplace Spirituality, in Sison, A.J.G. (editor-in-chief) *Handbook of Virtue Ethics in Business and Management* (part of International Handbooks in Business Ethics series). Heidelberg, Germany: Springer-Verlag GmbH. DOI 10.1007/978-94-007-6729-4_47-2

[15] "Four of every five professors in the U.S. (81%) describe themselves to be spiritual persons. Three of every five business professors also think that the spiritual dimension of faculty members' lives has a place in their jobs as academics, and one of three business professors think that colleges should be concerned with facilitating students' spiritual development. We also know that four out of five students have an interest in spirituality (80%), and that almost half (48%) of incoming college students believe that it is "very important" or "essential" that their college encourages their personal expression of spirituality. Even so, most students say that professors never encouraged such discussion (62%), nor have professors raised questions about the meaning and purpose of life (56%)." Page 52 in Dyck, B., & Neubert, M. (2010). *Management: Current practices and new directions*. Boston, MA: Cengage/Houghton Mifflin.

These data were taken from two studies—*The Spiritual Life of College Students: A national Study of College Students' Search for Meaning and Purpose* and *Spirituality and the Professoriate: A National Study of Faculty Beliefs, Attitudes, and Behaviors* – both done by the Higher Education Research Institute, University Graduate School of Education & Information Studies, University of California, Los Angeles. See also anecdotal evidence in Finder, A. (2007, May 2). Matters of faith find a new prominence on campus. *The New York Times*. http://www.nytimes.com/2007/05/02/education/02spirituality.html

[16] Michaelson et al (2014).

[17] Kohlberg, L. (1969). Stage and sequence: The cognitive development approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research,* 347–380. Chicago, IL: Rand McNally.

[18] These data and specific countries listed are drawn from research by Geert Hofstede which remains among the most-cited studies of cross-cultural differences for management, and is based on data collected between 1967 and 1973 from over 100,000 IBM employees working in 64 different countries. Hofstede originally identified five dimensions of national culture: 1) individualism; 2) materialism, 3) time-orientation, 4) deference to authority, and 5) uncertainty avoidance. Some of these five dimensions have been re-labeled. For example, what we call "materialism" others have labeled as: quantity vs quality of life

(Robbins & Coulter, 2003); achievement vs nurturing orientation (Jones & George, 2003); and aggressive vs passive goal behavior (Griffin 2002); and masculinity/femininity (Hofstede's original label). Robbins, S.P., & Coulter, M. (2003). *Management (7th edition).* Upper Saddle River, NJ: Prentice-Hall. Jones, G.R., & George, J.M. (2003). *Contemporary management (3rd edition).* New York, NY: McGraw-Hill Irwin; Griffin, R.W. (2002). *Management (7th edition).* Boston, MA: Houghton Mifflin Company. For more information see http://www.geert-hofstede.com/ and Hofstede, G. (2003). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations (2nd edition).* Newbury Park, CA: Sage Publications; Second Edition. See also Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage Publications.

Even though Hofstede's research is still widely-used, it is worth noting that we would expect changes to have taken place since he first collected his data. For example, consider the cultural and economic changes over the past few decades in countries like China and South Korea. Also, keep in mind that just as there tend to be differences *between* countries, there is also a lot of variation *within* countries (i.e., not everyone from the same country shares the same cultural values). Of course, there are other international data sets that have been collected since Hofstede collected his data, including the World Values Survey referred to below and Javidan, M., Dorfman, P.W., de Luque, M.S., & House, R.J. (2006). In the eyes of the beholder: Cross cultural lessons in leadership from Project GLOBE. *Academy of Management Perspectives*, 20(1): 67-90.

[19] A study of female managers in Costa Rica asked them to choose their preferred style among four types of managers: about 15% choose Authoritarian (managers make decisions and expect subordinates to implement them) or Persuasive (managers make decisions and explain them to subordinates before implemented). About 85% choose either Consultative style (managers consult with subordinates before making decisions) or Participative (managers presents issue to subordinates and allows them to make decision). Osland, J.S., Synder, M.M., & Hunter, L. (1998). A comparative study of managerial styles among female executives in Nicaragua and Costa Rica. *International Studies of Management & Organization,* 28(2): 54-73.

[20] Costa Rica's approach is being copied by other countries. Higgins, M. (2006, Jan 22). If it worked for Costa Rica . . . *New York Times.* http://query.nytimes.com/gst/fullpage.html?res=9E02E5DA143FF931A15752C0A9609C8B63&mcubz=0

[21] Zbinden, S. & Lee, D.R. (2005). Paying for environmental services: An analysis of participation in Costa Rica's PSA program. *World Development.* 33(2): 255-272.

[22] However, the study's authors point out that it would not be sub-optimal in terms of acquisitive-economics if greater financial value were given to the "carbon fixing" value of the forests and if its government would receive compensation for this. Bulte, E.H., Joenje, M. & Jansen, H.G.P. (2000). Is there too much or too little natural forest in the Atlantic Zone of Costa Rica. *Canadian Journal of Forest Research*, 30(3): 495-506.

[23] Marks, N., Abdallah, S., Simms A., & Thompson, S. (2006). *The unHappy Planet: An index of human well-being and environmental impact.* London, UK: New Economics Foundation.

[24] In Figure 5.2, Hofstede's individualism scores were used to categorize countries along the individualistic vs holistic continuum: Holistic countries were ones where Hofstede's individualism score was from 6 through 26 (Number of countries = 18); "medium" scores were from 27 through 60 (N = 18); and individualistic country scores were from 63 through 91 (N = 17). Hofstede's materialism scores were used to categorize countries along the materialistic vs transcendent continuum: Transcendent countries were ones where Hofstede's materialism score was from 5 through 43 (N = 17); medium scores were from 44 through 58 (N = 18); and materialistic country scores were from 61 through 95 (N = 18).

[25] Moreover, Costa Rica is living well beneath its ecological "means" since the biological capacity of Costa Rica's natural environment is about 47 acres per capita. Meanwhile, the biological capacity of the US's natural environment is slightly largely at 50 acres per capita. Given that the biological capacity of the entire planet is about 39 acres per capita, Costa Rica may serve as a better model for global development than the U.S.

[26] Costa Ricans make much more efficient use of the earth's resources, reaping .30 "units" of life satisfaction per acre compared to the Americans rate of only .03 units per acre. Similarly, Costa Ricans also seem to be twice as efficient in terms of their GDP per capita that they extract from the natural environment, since each acre used provides Costa Ricans with $314 of GDP per capita, whereas Americans extract only $155 GDP per capita.

[27] Allan, B.A., Autin, K.L., & Duffy, R.D. (2016). Self-determination and meaningful work: Exploring socioeconomic constraints. *Frontiers in Psychology*, 7:71. doi: 10.3389/fpsyg.2016.00071. Note that there is variation among workers as to what constitutes meaningful work. Beadle, R., & Knight, K. (2012). Virtue and meaningful work. *Business Ethics Quarterly*, 22(02): 433-450. Meaningful work can be seen to have three hallmarks: 1) the worker perceives that it to have an identifiable purpose in the organization; 2) it is consistent with and adds to the meaning of worker's broader personal life; and 3) it is beneficial for others and/or some greater good. Steger, M.F. (2017). Creating meaning and purpose at work. In L.G. Oades, M.F. Steger, A.D. Fave, & J. Passmore (eds.), *The Wiley Blackwell Handbook of the Psychology of Positivity and Strengths–Based Approaches at Work* (pp. 60-81). Oxford, UK: John Wiley & Sons.

[28] Michaelson et al (2014).

[29] Michaelson et al (2014). Managers need to pay special attention to meaningful work, because it is important to the new cohort of workers entering the workforce. When college students were asked what their top value was in a job, 28% said meaningful work, 25% said contribution to the greater good, 17% said intrinsic interest, and 8% said high anticipated earnings. Cited in Allan, B. A., Owens, R. L., & Duffy, R. D. (2016). Generation Me or Meaning? Exploring meaningful work in college students and career counselors. *Journal of Career Development*, 0894845316667599.

[30] According to Jamie Gutfreund of Los Angeles-based Intelligence Group, which studies generational trends. White, J. (2014, March 30). Millennial generation eager to work, 'but on their terms'. *The Columbus Dispatch*. http://www.dispatch.com/content/stories/business/2014/03/30/eager-to-work-but-on-their-terms.html. Winogard, M., & Hais, M. (2014, May 28). How Millennials could upend Wall Street and corporate America. *Brookings*. https://www.brookings.edu/research/how-millennials-could-upend-wall-street-and-corporate-america/

[31] See reviews in: Rosso, B.D., Dekas, K.H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30: 91-127. Berg, J.M., Dutton, J.E., & Wrzesniewski, A. (2013). Job crafting and meaningful work. In B.J. Dik, Z.S. Byrne & Steger, M. F. (Eds.), Purpose and meaning in the workplace, 81-104. Washington, DC: American Psychological Association. Michaelson et al (2014).

[32] Rosso et al (2010).

[33] The following studies describe the negative relationship between meaningful work and depression: Allan, B.A., Dexter, C., Kinsey, R., & Parker, S. (2016). Meaningful work and mental health: Job satisfaction as a moderator. *Journal of Mental Health*, 1-7. Mitra, R., & Buzzanell, P.M. (2016). Communicative tensions of meaningful work: The case of sustainability practitioners. *Human Relations*, 0018726716663288. Schermuly, C.C., & Meyer, B. (2016). Good relationships at work: The effects of leader–member exchange and team–member exchange on psychological empowerment, emotional exhaustion, and depression. *Journal of Organizational Behavior*, 37: 673–691. Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53, 80–93. doi:10.1037/ 0022-0167.53.1.80, cited in Allan, B.A., Douglass, R.P., Duffy, R.D., & McCarty, R.J. (2016). Meaningful work as a moderator of the relation between work stress and meaning in life. *Journal of Career Assessment*, 24(3): 429-440.

[34] Howell, K.H., Coffey, J.K., Fosco, G.M., Kracke, K., Nelson, S.K., Rothman, E.F., & Grych, J.H. (2016). Seven reasons to invest in well-being. *Psychology of Violence*, 6(1): 8.

[35] Joyce, S., Modini, M., Christensen, H., Mykletun, A., Bryant, R., Mitchell, P.B., & Harvey, S.B. (2016). Workplace interventions for common mental disorders: A systematic meta-review. *Psychological Medicine*, 46(04): 683-697.

[36] Schermuly & Meyer (2016).

[37] Paradoxically, that same year 44% were completely satisfied with their job, 42% somewhat satisfied, 9% somewhat dissatisfied, and only 4% completely dissatisfied. It seems people have learned to be satisfied with stressful jobs. 2016. Work and workplace. *Gallup*. http://www.gallup.com/poll/1720/work-work-place.aspx .

Only 17% of global workforce is actively engaged in their work, with most of the workplace stress being caused by dysfunctional managers. Page 11 in Burke, R.J. (2017). Work and wellbeing. On Burke, R.J. & Page, K.M. (Eds.) *Research Handbook on Work and Well-being,* 3-36. Cheltenham, UK: Edward Elgar.

[38] As used in the Gallup research presented here, we use the term "overall well-being" to encompass career well-being (liking what you do), social well-being (strong relationships and love), financial wellbeing, physical well-being and community well-being (engagement where you live). Robinson, J. (2013). Small shifts in wellbeing have a big impact on performance. *Gallup Business Journal*. http://www.gallup.com/businessjournal/160511/small-shifts-wellbeing-big-impact-performance.aspx

[39] Investing in well-being is worthwhile because it: enhances economic well-being, people are more creative, more productive motivates people, improves health and longevity, reduce on-the-job conflict, improve work quality and efficiency, reduces employee turnover and absenteeism. Howell, K.H., Coffey, J. K., Fosco, G.M., Kracke, K., Nelson, S.K., Rothman, E.F., & Grych, J.H. (2016). Seven reasons to invest in well-being. *Psychology of Violence*, 6(1): 8.

[40] Robinson (2013).

[41] Robinson (2013). Howell et al (2016) state: "We have learned from longitudinal studies that people with greater well-being and more positive affect go on to have greater success in marriage, friendships, and work, earn higher incomes, experience better physical health, and are less likely to abuse substances". Howell, K.H., Coffey, J.K., Fosco, G.M., Kracke, K., Nelson, S.K., Rothman, E.F., & Grych, J.H. (2016). Seven reasons to invest in well-being. *Psychology of Violence*, 6(1): 8-14.

[42] Page 131 in Hawken, P. (1993). *The ecology of commerce: A declaration of sustainability.* New York, NY: HarperBusiness.

[43] Walsh, D. (1994). *Selling out America's children: How America puts profits before values and what parents can do.* Minneapolis, MN: Fairview Press. Taken from Batstone, D. (2005, July 20). Mass media are sucking out your kids' brains. *SojoMail.* Batstone present two additional key values that Walsh identifies: (5) Violence is entertaining; and (6) Always seek pleasure and avoid boredom. See also Shrum, L.J., Burroughs, J.E., & Rindfleisch, A. (2005). Television's cultivation of material values. *Journal of Consumer Research*, *32*(3), 473-479, who argue that television plays a significant role in glamorizing affluence and cultivating viewers to become materialists.

[44] http://www.gallup.com/poll/1720/work-work-place.aspx

[45] "Increased work hours, then, often provide short-term benefits in a sort of positive feedback loop, until the system becomes radically unstable for the overworked, often resulting in psychological trauma." Cheney, G. Zorn, T.E. , Planalp, S. & Lair, D.J. (2008). Meaningful work and personal/social well-being organizational communication engages the meanings of work. *Annals of the International Communication Association*, 32:1: 137-185.

[46] Winograd, M., & Hais, M. (2014). How millennials could upend Wall Street and corporate America. *Brookings Institute*. https://www.brookings.edu/wp-content/uploads/2016/06/Brookings_Winogradfinal.pdf

[47] 39% preferred TBLa, and 11% TBLb. This was asked in about 2010 among students in Winnipeg, Manitoba, Canada (data collected by lead author).

[48] Schermuly, C.C., & Meyer, B. (2016). Good relationships at work: The effects of leader–member exchange and team–member exchange on psychological empowerment, emotional exhaustion, and depression. *Journal of Organizational Behavior,* 37: 673–691.

[49] Berg, J.M., Dutton, J.E., & Wrzesniewski, A. (2013). *Job crafting and meaningful work*. In Dik, B.J., Byrne, Z.S. & Steger, M.F. (Eds.). *Purpose and meaning in the workplace,* 81-104. Washington, DC: American Psychological Association.

[50] Berg et al (2013).

[51] Purser, R.E., & Milillo, J. (2015). Mindfulness revisited: A Buddhist-based conceptualization. *Journal of Management Inquiry*, 24(1): 3-24.

[52] Grant, A.M. (2008). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology*, 93: 108–124. Michaelson et al (2014).

[53] Tsutsumi, A., Nagami, M., Yoshikawa, T., Kogi, K., Kawakami, N. (2009). Participatory intervention for workplace improvements on mental health and job performance among blue-collar workers: a cluster randomized controlled trial. *Journal of Occupational and Environmental Medicine*, 51:554–563. Tan, L., Wang, M.J., Modini, M., Joyce, S., Mykletun, A., Christensen, H., & Harvey, S.B. (2014). Preventing the development of depression at work: a systematic review and meta-analysis of universal interventions in the workplace. *BMC Medicine*, 12(1): 74.

[54] Purser & Milillo (2015).

[55] Page 182 in Weber, M. (1958, 1904–1905). *The Protestant ethic and the spirit of capitalism* (trans. T. Parsons.) New York, NY: Scribner's.

[56] Page 429 in Smith, A. (1993, orig 1776). *An inquiry into the nature and causes of the wealth of nations* (ed. Sutherland, K.). Oxford: Oxford University Press. Cited in Michaelson et al (2014).

[57] Colbert, A.E., Bono, J.E., & Purvanova, R.K. (2016). Flourishing via workplace relationships: Moving beyond instrumental support. *Academy of Management Journal*, 59(4): 1199-1223.

[58] According to Gallup, the non-financial meaningfulness of work seems to be have been increasing. Between 1990 and 2010, 58% of respondents said they would continue working even if they won $10 million (36% in current job, and 19% in a different job). Since 2010, 68% said they would continue working (44% in current job, 23% in different job). This might suggest that many people work for reasons greater than financial well-being. http://www.gallup.com/poll/1720/work-work-place.aspx

[59] According to the literature reviewed in Giacalone, R.A. (2004), the ratio between those holding primarily materialist values versus those holding these emerging nonmaterialist values changed from 4:1 in 1970 to 4:3 by 1990. Giacolone, R.A. (2004). A transcendent business education for the 21st century. *Academy of Management Learning and Education,* 3(4): 415-420.

[60] New American Dream Survey (September, 2004), at www.newdream.org.

[61] This point will be discussed in more detail in chapter 4.

[62] Even so, there is also evidence to suggest that many people continue to see this gap as legitimate, perhaps because these views have become institutionalized. Blount, S., Jost, J.T., Pfeffer, J. & Hunyady, G. (2003). Fair-market ideology: Its cognitive-motivational underpinnings. *Stanford GSB Research Paper No. 1816*. Available at SSRN: http://ssrn.com/abstract=441005

[63] Since the 1990s interest in spirituality has increased significantly, and now it is not unusual to find meditation rooms, chapels, prayer circles, and Bible studies in the workplace (Dyck & Neubert, 2010).

[64] Kriger, M. & Seng, Y. (2005). Leadership with inner meaning: A contingency theory of leadership based on the worldviews of five religions. *The Leadership Quarterly*, 16:771-806.

[65] These data were taken from two studies—*The Spiritual Life of College Students: A national Study of College Students' Search for Meaning and Purpose* and *Spirituality and the Professoriate: A National Study of Faculty Beliefs, Attitudes, and Behaviors*—both done by the Higher Education Research Institute, University Graduate School of Education & Information Studies, University of California, Los Angeles. See also anecdotal evidence in Finder, A. (2007, May 2). Matters of faith find a new prominence on campus. *The New York Times.* http://www.nytimes.com/2007/05/02/education/02spirituality.html?mcubz=0

66 Building on Gutstein, S.E. & Sheely, R.K (2002). Friendships are relationships. *Relationship Development Intervention with Young Children*, 2: 17-22. London: Jessica Kingsley Publishers.

67 At some level we are all aware of "the necessity of non-instrumental relationships for a good or happy life." See page 275 in Bruni, L. (2016). Public happiness and relational goods: The crucial link that economics and policy often forget. In Bartoloni, S., Bilancini, E., Bruni, L. & Porta, P.L. (eds.) *Policies for Happiness* (pp 264-280). Oxford: Oxford University Press.

68 Colbert, A.E., Bono, J.E., & Purvanova, R.K. (2016). Flourishing via workplace relationships: Moving beyond instrumental support. *Academy of Management Journal*, 59(4):1199-1223.

69 Colbert et al (2016).

70 Bruni (2016).

71 Bruni (2016).

72 Putnam, R.D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1): 65-78. Page 8 in Carter, M. (2005) says: "America has seen the demise of its connectivity and social capital since 1975. … In 1975, the average American entertained friends at home 15 times per year, the equivalent figure today is now barely half that. Virtually all leisure activities (from playing volleyball to playing music together) that involve doing something with someone else are declining." Carter, M. (2005). The formula for connectivity: Relationship preceding information. Faculty Lecturer of the Year, 2004-2005, Chaffey College, Rancho Cucamonga, CA. http://www.chaffey.edu/fac-handbook/b/pdf/2005MonicaCarter.pdf

73 Leung, A., Kier, C., Fung, T., Fung, L., & Sproule, R. (2011). Searching for happiness: The importance of social capital. *Journal of Happiness Studies*, *12*(3): 443-462.

74 Aranda, L. (2014). Contextualizing the *Home Economicus*: Essays on non-instrumental relationality, quality of life, and civic engagement. Dottorato di ricerca in Economia, Universita Ca Foscari, Venezia. http://dspace.unive.it/bitstream/handle/10579/4670/955825-1158827.pdf?sequence=2

75 Shakya, H.B., & Christakis, N.A. (2017). Association of Facebook use with compromised well-being: A longitudinal study. *American Journal of Epidemiology*, 185(3): 203-211.

76 Lewis, D.M., Al-Shawaf, L., Russell, E.M., & Buss, D.M. (2015). Friends and happiness: An evolutionary perspective on friendship. In *Friendship and Happiness*, (pp 37-57). Netherlands: Springer.

77 Nouwen, H. (1979). *The wounded healer*. New York, NY: Image Books

78 Plowman et al (2008) describe how "a simple act of generosity" that challenged norms (and even prompted some criticism from businesses in the area) triggered a process that eventually resulted in the transformation of a mostly Caucasian and socio-economically well-to-do congregation located downtown in a major US city into becoming a congregation that welcomed everyone from the surrounding neighborhood, including socially marginalized people. Plowman, D.A., Baker, L.T., Beck, T.E., Kulkarni, M., Solansky, S.T., & Travis, D.V. (2007). Radical change accidentally: The emergence and amplification of small change. *Academy of Management Journal*, 50(3): 515-543.

79 Baxter, A. (2013, Aug 14). More companies encourage workers to volunteer, on the clock. *NPR*. http://www.npr.org/2013/08/14/211961622/more-companies-encourage-workers-to-volunteer-on-the-clock. Fry, L.W., Matherly, L.L., & Ouimet, J.R. (2010). The spiritual leadership balanced scorecard business model: the case of the Cordon Bleu–Tomasso Corporation. *Journal of Management, Spirituality and Religion*, 7(4): 283-314.

80 Along similar lines, a growing number of medical schools recognize the importance of going beyond merely teaching instrumental skills, and are requiring medical students to take courses in the humanities that will improve their ability to see their patients as people. Dr. David Muller, the chairman of medical education at the Mount Sinai School of Medicine, describes the merits of an art-appreciation course for medical students: "To make a better doctor means to me — and I can't speak for everyone — one who sees the person and not just the patient … not just an organ system that is screwed up." Similarly, to make a

better manager means seeing the person, and not simply the (commodified) customer, supplier, subordinate, or boss. Kennedy, R. (2006, April 17). At some medical schools, humanities join the curriculum. *New York Times.* http://www.nytimes.com/2006/04/17/arts/design/17sina.html?ex=1146024000&en=6412dcc4b97ef90c&ei=5070&emc=eta1

[81] Goleman, D., Boyatzis, D., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Cambridge, MA: HBR Press.

[82] Smeaton, D., Ray, K., & Knight, G. (2014). *Costs and benefits to business of adopting work life balance working practices: A literature review*. London: UK Department for Business, Innovation and Skills. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/323290/bis-14-903-costs-and-benefits-to-business-of-adopting-work-life-balance-working-practices-a-literature-review.pdf

[83] Such an characterization may be a bit over-simplistic for the scholarly literature, but it is consistent with the popular understanding as illustrated by the definition in Wikipedia: "Work–life balance is a concept including proper prioritizing between 'work' (career and ambition) and 'lifestyle' (health, pleasure, leisure, family and spiritual development/meditation)." Accessed May 4, 2017 at https://en.wikipedia.org/wiki/Work–life_balance

[84] Emphasis added here. Page 145 in Gold, L. (2010). *New financial horizons: The emergence of an economy of communion*. Hyde Park, NY: New City Press.

[85] Krebs, D.L. (2011). How altruistic by nature? In Brown, S.L., Brown, R.M., & Penner, L.A. (eds). *Moving beyond self-interest: Perspectives from evolutionary biology, neuroscience, and the social sciences* (pp 25-38). Oxford: Oxford University Press.

[86] We will discuss this further under servant leadership in Chapter 16. Greenleaf, R. (1977/2002). *Servant leadership.* New York, NY: Paulist Press.

[87] Gaarlock, S.B., & Rouse, H.N. (2011, Sept 2). Harvard most values success, 2014 says. *The Harvard Crimson*. http://www.thecrimson.com/article/2011/9/2/harvard-values-ranked-survey/. Cited on page 242 in Grant, A. (2013). *Give and take: A revolutionary approach to success*. New York, NY: Viking.

[88] Fehr, R., Fulmer, A., Awtrey, E., & Miller, J.A. (2017). The grateful workplace: a multilevel model of gratitude in organizations. *Academy of Management Review*, 42(2): 361-381.

[89] See literature review in Burke (2017). Long-term unemployment increases risk of suicide.

[90] About 900 million live in the countries involved in the 14 conflict regions around the world where more than 1,000 people died in 2016. This amounts to more than 12% of the 7.347 billion people in world in 2015. https://en.wikipedia.org/wiki/List_of_ongoing_armed_conflicts. http://data.worldbank.org/indicator/SP.POP.TOTL.

[91] Jones, S. (2015, June 18). One in every 122 people is displaced by war, violence and persecution, says UN. *The Guardian*. https://www.theguardian.com/global-development/2015/jun/18/59m-people-displaced-war-violence-persecution-says-un

[92] The exact estimate is $9.46 trillion in 2012, when global population was about 7 billion. Dickenson-Jones, G., Hyslop, D., & Vaira-Lucero, M. (2014). Estimating the global costs of violence. *Business, Peace and Sustainable Development*, (2): 6-27.

[93] Data taken from worldbank.org.

[94] Dickenson-Jones, G., Hyslop, D., & Vaira-Lucero, M. (2014). Estimating the global costs of violence. *Business, Peace and Sustainable Development*, (2): 6-27.

[95] $15 billion profits divided by 667,000 employees = $22,488 profit/employee. Stebbins, S., & Frohlich, T.C. (2017, March 27). 20 companies profiting the most from war. *msn.money*. https://www.msn.com/en-us/money/savingandinvesting/20-companies-profiting-the-most-from-war/ar-AAmTAzm#page=1. Note

that the profit and employment figures for each firm was calculated by multiplying each firms' total profit and total employment by the proportion of total sales that were military sales.

[96] Morrison, M. (2015). *Understanding the emergence of private security companies and variance in security contracting*. Master of Arts Thesis, University of Ottawa. https://ruor.uottawa.ca/bitstream/10393/32751/1/Morrison_Melissa_2015_researchpaper.pdf

[97] Shake, K. (2015, Aug 19). Reserve soldiers' jobs for soldiers, not contractors. *New York Times.* https://www.nytimes.com/roomfordebate/2014/10/26/blackwater-and-the-role-of-military-contractors/reserve-soldiers-jobs-for-soldiers-not-contractors

[98] Shake (2015).

[99] Much of that is borrowed money, and the interest payments will total almost $8 trillion by 2053. Information about U.S. war in Afghanistan, Iran and Pakistan taken from "Costs of War". *Watson Institute International & Public Affairs, Brown University*. http://watson.brown.edu/costsofwar/about. Note also that in a given year (2012) the military expenses cost over US$5,000 per person. Dickenson-Jones, G., Hyslop, D., & Vaira-Lucero, M. (2014). Estimating the global costs of violence. *Business, Peace and Sustainable Development*, (2): 6-27.

[100] See also Rose, J.R. (2015). Blowback: *The American military empire, 'free-market' globalization, the Iraq wars, and the rise of the Islamic State*. Thesis, Sociology, San Diego State University.

[101] Di Muzio, T. (2016). Energy, capital as power and world order. In *The Palgrave Handbook of Critical International Political Economy,* (pp 267-287). UK: Palgrave Macmillan. Citing Boehm, C. (2001). *Hierarchy in the forest: The evolution of egalitarian behavior.* Cambridge, MA: Harvard University Press.

[102] Perhaps a phenomenon similar to *Pax Romana* occurred in China, as illustrated by the Hall of Imperial Peace (*Qin An Dian*) in Beijing's Forbidden City associated with the Ming Dynasty.

[103] Di Muzio (2016).

[104] Some have talked about the most recent terrorism acts being inspired, at least in part, by issues related to global economic inequality. Ferro, S. (2015, Dec 9). How Economic Inequality Makes Terror Attacks More Likely. *Huffington Post*. http://www.huffingtonpost.ca/entry/thomas-piketty-terrorism_us_565e24d2e4b08e945fed3e38

[105] Hedges, C. (2003, July 6). What every person should know about war. *New York Times*. http://www.nytimes.com/2003/07/06/books/chapters/what-every-person-should-know-about-war.html

[106] Di Muzio (2016).

[107] "We find that in particular oil production, oil reserves, oil dependence, and oil exports are associated with a higher risk of initiating conflict while countries enjoying large oil reserves are more frequently the target of military actions." Page 1 in Strüver, G., & Wegenast, T. (2016). The hard power of natural resources: Oil and the outbreak of militarized interstate disputes. *Foreign Policy Analysis*, https://academic.oup.com/fpa/article-abstract/doi/10.1093/fpa/orw013/2625529/The-Hard-Power-of-Natural-Resources-Oil-and-the?redirectedFrom=fulltext

[108] Colgan, Jeff D. (2013). Fueling the fire: Pathways from oil to war. *Quarterly Journal: International Security*, 38 (2): 147-180.

[109] This observation goes back at least as far as Immanuel Kant (1795). Chatagnier, J.T., & Kavaklı, K.C. (2014). From economic competition to military combat: Export similarity and international conflict. *Journal of Conflict Resolution*, 0022002715613565. Kant, I. (1970, orig 1795). *Perpetual peace: A philosophical sketch*. Cambridge: Cambridge University Press.

[110] This suggests the removing free trade and international commerce will increase the likelihood of war. It also suggests that. That said, just as competition will intensify the more two business are competing for the same customers and suppliers, so also wars are also more likely when countries rely on the same customers

or suppliers. Chatagnier, J.T., & Kavaklı, K.C. (2014). From economic competition to military combat: Export similarity and international conflict. *Journal of Conflict Resolution*, 0022002715613565.

[111] This threefold approach (FBL, TBL and SET) to Porter's model builds on Laasch, O., & Conaway, R. (2015). *Principles of responsible management: Global sustainability, responsibility, and ethics*. Australia: Cengage Learning. Porter, M.E., & Kramer, M.R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12): 78-927.

[112] Based on a presentation by R. Miller, March 29, 1993; interview with R. Shuttleworth.

[113] Thomas, D.P., & Mitra, S. (2017). Global civil society and resistance to Canadian mining abroad: Building and enhancing the boomerang model. *Studies in Political Economy*, 98(1): 48-70. Saunders, S. (2015, Sept 23). Mining injustice: Will human rights crimes by Canadian resource companies abroad feature in Munk-hosted foreign policy debate? *NOW magazine*. https://nowtoronto.com/news/mining-injustice/

[114] This discussion draws from and builds upon ideas found in Roesen, R. (2004). How to overcome ethnocentrism: Approaches to a culture of recognition by history in the Twenty-First century. *History and Theory*. 43(4): 118-129; Michailova, S. & Nielsen, B.B. (2006). MNCs and knowledge management: A typology and key features. *Journal of Knowledge Management* 10(1): 44-54.

[115] This is part of the forward. "The CRT Principles have been published in twelve languages, utilized in business school curricula worldwide, and are widely recognized as the most comprehensive statement of responsible business practice formulated by business leaders for business leaders." Principles for Business. *Caux Round Table for Moral Capitalism.* http://www.cauxroundtable.org/index.cfm?&menuid=8

[116] Page 6 of "Principles for Responsible Globalization." *Caux Round Table for Moral Capitalism.* http://www.cauxroundtable.org/index.cfm?&menuid=103

[117] This discussion on ethnocentrism, polycentrism and egali-centrism draws from and builds upon ideas found in Roesen (2004) and Michailova, S., & Bernhard Nielsen, B. (2006). MNCs and knowledge management: a typology and key features. *Journal of Knowledge Management*, 10(1): 44-54. Dickenson-Jones, G., Hyslop, D., & Vaira-Lucero, M. (2014). Estimating the global costs of violence. *Business, Peace and Sustainable Development*, (2): 6-27.

[118] Chen, F., Bapuji, H. Dyck, B. & Wang, X. (2012). I learned more than I taught: The hidden dimension of learning in knowledge transfer. *The Learning Organization*, 19(2): 109-120.

[119] Kielburger, C. & Kielburger, M., (2017, July 17). Eating towards empathy—and conflict resolution. *Winnipeg Free Press,* B2.

[120] See Conflict Kitchen's home page at http://conflictkitchen.org. Also described in Kielburger (2017).

[121] Thus, it is not surprising that most entrepreneurship research and teaching focuses on the individual level of analysis: entrepreneurs are most frequently described in terms of their traits, actions, and outcomes. Ladd, T. (2016). Customer development and effectuation: A review of textbooks to teach a contemporary introduction to entrepreneurship. *Management Teaching Review*, 1: 205–210.

[122] Wrzesniewski, A., McCauley, C., Rozin, P., & Schwartz, B. (1997). Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, 31(1): 21-33.

[123] While one might assume that some types of jobs are more likely to produce different orientations, this intuition appears to be wrong. Surveys of people doing exactly the same job show relatively equal numbers of each kind of orientation. (Wrzesniewski et al, 1997). In other words, two people doing exactly the same task may have very different orientations to that task; one may view it as a job, while the other sees the same task as a calling. Likewise, there are people who feel a calling orientation toward what most would see as bad work, and there are people who have a job orientation toward work that many observers might consider highly meaningful and important (Dik, B.J., & Duffy, R.D. (2009). Calling and vocation at work: Definitions and prospects for research and practice. *The Counseling Psychologist*, 37(3): 424-450). The causes of work orientations are not well understood, but the orientations appear to be stable individual

differences; like different personality traits, each of us appear to have a particular orientation to any given task.

[124] Wrzesniewski et al (1997).

[125] Duffy, R.D., & Sedlacek, W.E. (2010). The salience of a career calling among college students: Exploring group differences and links to religiousness, life meaning, and life satisfaction. *The Career Development Quarterly*, 59(1): 27-41.

[126] Of course, all options are possible. Some FBL entrepreneurs may feel that their creation of ever greater profit is a calling and one which contributes to society, just as some SET entrepreneurs may take on tasks in which they see little value in order to make the money to achieve their ultimate goals. However, such cases are likely rare.

[127] Duffy, R.D., Dik, B.J., & Steger, M.F. (2011). Calling and work-related outcomes: Career commitment as a mediator. *Journal of Vocational Behavior*, 78(2): 210-218.

[128] Of course, even without intending to, other work orientations can also lead to the development of entrepreneurial ventures that create positive externalities.

[129] For example, imagine that you are choosing an outfit for an exciting date this weekend. You have two equally appealing outfits and cannot decide which one to wear. This choice is a dilemma, because there is no clearly better option, but it is not a particularly ethical dilemma. In contrast, imagine that you have discovered a new drug that can be developed to cure cancer or heart disease. Should you develop the drug? Of course; that decision is not a dilemma. But suppose there is a limited supply of the ingredients you need and no way to get more. Therefore, you can only develop the drug to cure one of the two conditions, either cancer or heart disease, but not both. Which should you develop? That choice is an ethical dilemma: there are very good reasons to choose either option, and whichever one you choose, it will benefit some people at the expense of others.

[130] Burton, L. (2008, June 22). Credit him with business savvy. *Seattle Post-Intelligencer.* http://www.seattlepi.com/business/article/Credit-him-with-business-savvy-1277301.php

[131] Keegan, P. (2015, Nov) Here's what really happened at the company that set a 70,000 minimum wage. *Inc.* https://www.inc.com/magazine/201511/paul-keegan/does-more-pay-mean-more-growth.html

[132] Murray, R. (2016, Aug 11). Gravity Payments' $70K minimum salary: CEO Dan Price shares result over a year later. *Today.* http://www.today.com/money/gravity-payments-70k-minimum-salary-ceo-dan-price-shares-results-t101678

[133] Consistent with this thinking, 18 months after the change, Gravity Payments' staff had an increased retention rate and reported greater happiness on staff surveys. Murray, R. (2016).

[134]Murray, R. (2016).

[135] Cohen, P. (2015, July 31). A company copes with backlash against the raise that roared. *New York Times*. https://www.nytimes.com/2015/08/02/business/a-company-copes-with-backlash-against-the-raise-that-roared.html?_r=2

Endnotes for Chapter 6

[1] Information for this case was taken from: Grameen Bank homepage http://www.grameen.com; Yunus, M. (2014) *Super happiness.* Dhaka, Bangladesh: Subarna; Dyck, B. (2001). Micro-financing and international development: The MEDA approach. Presented at *CIBER*, San Diego, March 28-31; Jolis, A. (1996). The Good Banker. *The Independent (Sunday Supplement (May 5)* accessed Nov 8, 2006 at http://www.grameen-info.org/agrameen/profile.php3?profile=2; Tharoor, I. (2006, Oct 13). Paving the way out of poverty: Bangladeshi economist Muhammad Yunus was awarded the 2006 Nobel Peace Prize not for giving to the poor, but for helping them to help themselves. *Time.* Accessed Nov 8, 2006 at http://www.time.com/time/world/article/0,8599,1546100,00.html; Yunus, M. (1996). Fighting poverty

from the bottom p: An address by Muhammad Yunus. *TIMELINE* (November/December). Accessed Nov 8, 2006 at http://www.grameen-info.org/mcredit/timeline.html; "The Lender -- Muhammad Yunus." Found Nov 8/06 at http://www.grameen-info.org/agrameen/profile.php3?profile=3.

[2] The quotes in the four phases are from Yunus (1996).

[3] Jolis (1996).

[4] According to Yunus (1996): "When we started, we looked at all the other banks in Bangladesh and found that only 1% of their membership were women. We aimed for 50/50 in the beginning. The main challenge for a poor woman was overcoming the fear in her which was holding her up. We found that compared to men who spent money more freely, women benefited their families much more. Women wanted to save and invest and create assets, unlike men who wanted to enjoy right away. Women are more self-sacrificing, they want to see their children better fed, better dressed and, as a result, the conditions of the entire community improved" (Tharoor, 2006).

[5] According to Yunus (1996): "Each branch is self-contained, its own Grameen Bank, made up of a community of borrowers and local staff who all know each other. We have a total staff of 20,000, and lend $800 million a year to 6.6 million members nationwide. The Bank is very close to its community; there is a relationship of trust and the system as a whole encourages repayment. There is no attempt on anyone's part to outsmart anyone. After all, everyone wants to keep the door open to opportunity and we present that opportunity" (Tharoor, I. 2006).

[6] Khieu, H.D., Mullineaux, D.J., & Yi, H.C. (2012). The determinants of bank loan recovery rates. *Journal of Banking & Finance*, 36(4): 923-933.

[7] Because of its amazing success, TBL-managed banks have started to provide microfinancing services, but the benefits for micropreneurs are compromised when banks seek to maximize profits. Shahriar, A.Z.M., Schwarz, S., & Newman, A. (2016). Profit orientation of microfinance institutions and provision of financial capital to business start-ups. *International Small Business Journal*, 34(4): 532-552.

[8] Intrapreneurs, the entrepreneurs who work within existing organizations, are discussed in Chapter 14.

[9] Kane, T.J. (2010). The importance of startups in job creation and job destruction. *SSRN Scholarly Paper No. ID 1646934*. Rochester, NY: Social Science Research Network.

[10] OECD. (2017). *Financing SMEs and entrepreneurs 2017.* Paris, France: Organisation for Economic Cooperation and Development. http://www.keepeek.com/Digital-Asset-Management/oecd/industry-and-services/financing-smes-and-entrepreneurs-2017_fin_sme_ent-2017-en#.WYOv260ZNBw

[11] Global Entrepreneurship Monitor (2017). *2016/17 global report.* GEM Global Entrepreneurship Monitor, Babson College, Universidad del Desarrollo, Universiti Tun Abdul Razak, Tecnológico de Monterrey, London Business School, Babson Park, MA, Santiago, London.

[12] Hunt, R., & Ortiz-Hunt, L. (2017). Entrepreneurial round-tripping: The benefits of newness and smallness in multi-directional value creation. *Management Decision,* 55: 491–511.

[13] See page 175 in Daft, R.L. (2003). *Management (6th edition).* Mason, OH: Thomson South-Western; Hellriegel, D., Jackson, S.E., & Slocum, J.W. (2002). *Management: A competency-based approach (9th edition).* Cincinnati, OH: Thomson South-Western.

[14] The Millennial Survey 2014: Big demands and high expectations. *Deloitte*. https://www2.deloitte.com/al/en/pages/about-deloitte/articles/2014-millennial-survey-positive-impact.html. Zetlin, M. (2013, Dec 17). Survey: 63% of 20-somethings want to start a business. *Inc*. https://www.inc.com/minda-zetlin/63-percent-of-20-somethings-want-to-own-a-business.html

[15] Global Entrepreneurship Monitor (2017).

[16] Financing SMEs and entrepreneurs (2017).

[17] Freeman, J., Carroll, G.R., & Hannan, M.T. (1983). The liability of newness: age dependence in organizational death rates. *American Sociological Review*, 48: 692–710.

[18] Based on U.S. data, 1993 to 2013, cited in Solis, C.J. (2016). *Small Retail Business Owner Strategies Needed to Succeed Beyond 5 Years* (Doctoral dissertation, Walden University).

[19] Financing SMEs and entrepreneurs (2017).

[20] García-Serrano, C. (2008). Does size matter? The influence of firm size on working conditions and job satisfaction. *ISER Working Paper Series, No. 2008-30.*

[21] See page 136 in Hellriegel et al, (2002). See also page 236 in Schermerhorn, J.R. (2002). *Management (7th edition).* New York, NY: John Wiley & Sons.

[22] Fried, Y., & Ferris, G.R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology*, 40(2): 287-322.

[23] Longenecker, J., Petty, J., Palich, L., & Hoy, F. (2013). *Small business management (17th edition).* Stamford, CT: South-Western College Pub.

[24] Sirmon, D.G., & Hitt, M.A. (2003). Managing resources: Linking unique resources, management, and wealth creation in family firms. *Entrepreneurship Theory and Practice*, 27: 339–358.

[25] Micelotta, E.R., & Raynard, M. (2011). Concealing or revealing the family? Corporate brand identity strategies in family firms. *Family Business Review*, 24(3): 197-216. Funk, J. & Litz, R. (2009, April). Got family? The influence of "family" identity on customer loyalty. Poster presented at *Family Enterprise Research Conference*, Winnipeg, MB.

[26] Dodd, S.D., & Dyck, B. (2015). Agency, stewardship, and the universal-family firm: A qualitative historical analysis. *Family Business Review*, 28(4): 312-331.

[27] Alderson, K. (2015). Conflict management and resolution in family-owned businesses: A practitioner focused review. *Journal of Family Business Management*, 5(2): 140-156.

[28] Szaky, T. (2013). *Revolution in a bottle: How TerraCycle is redefining green business*: New York, NY: Penguin.

[29] Funk, J. (2014). Do family businesses "pay it forward"? Seeking to understand the relationship between intergenerational behaviour and environmentally sustainable business practices. *Doctoral dissertation, Asper School of Business*, University of Manitoba, Winnipeg, Canada.

[30] Dodd & Dyck (2015). A group of businesses related to the "Economy of Communion" movement illustrate the hallmarks of Universal family firms in practice: (1) they treat employees, competitors, and even non-stakeholders as family; (2) they reduce negative externalities; (3) one-third of their profits are redistributed to people in need in other parts of the world, and one-third are invested in educational efforts that nurture a culture of giving; (4) they adopt a long-term orientation, foster participative decision-making, employ people from the margins of society, and reduce income inequality within the firm. This summary is taken from Dodd & Dyck (2015). For an excellent review of the research and literature on Economy of Communion, see Gold, L. (2010). *New financial horizons: The emergence of an economy of communion*. Hyde Park, NY: New City Press. For a first-person account, see Mundell, J.A. (2011, January). The Economy of Communion business and corporate social responsibility. In *The Economy of Communion and the African Economic Vocation – Theory and best practice*. Nairobi, Kenya: Catholic University of Eastern Africa.

[31] A review of the existing literature found that 42 traits have been described as defining entrepreneurs, including drive, perseverance, tolerance for ambiguity, internal locus of control, calculated risk taking and creativity. Hornaday, J.A. (1982). Research about living entrepreneurs. In C. Kent, D. Sextobn, & K. Vesper (eds), *Encyclopedia of entrepreneurship*. Englewood Cliffs, NJ: Prentice Hall.

[32] This example is taken from pages 3 and 4 in Dees, J.G., Emerson, J. & Economy, P. (2001). *Enterprising nonprofits: A tool kit for social entrepreneurs.* New York, NY: John Wiley & Sons.

[33] In class presentation by Mike Fata, Winter 2014, Asper School of Business, Winnipeg, Manitoba.

[34] Loney, S. (with W. Braun) (2016). An army of problem solvers: Reconciliation and the solutions economy. Shaun Loney.

[35] Koop, P-J. (2006, March). Engineering answers to landmine problem. *Peace Projections*, 22 (1): 1-2.

[36] Entrepreneurial passion is an important, and perhaps essential, quality to attract financial support. Cardon, M.S., Gregoire, D.A., Stevens, C.E. & Patel, P.C. (2013). Measuring entrepreneurial passion: Conceptual foundations and scale validation. *Journal of Business Venturing* 28: (3): 373-396.

[37] Pitches from some successful organizations are provided at the following site: https://slidebean.com/blog/startups/elevator-pitch-deck

[38] Honig, B. (2004). Entrepreneurship education: Toward a model of contingency-based business planning. *Academy of Management Learning and Education*, 3 (3): 258-273.

[39] Brinckmann, J., Grichnik, D., & Kapsa, D. (2010). Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning–performance relationship in small firms. *Journal of Business Venturing*, 25: 24–40. Mayer-Haug, K., Read, S., Brinckmann, J., Dew, N., & Grichnik, D. (2013). Entrepreneurial talent and venture performance: A meta-analytic investigation of SMEs. *Research Policy*, 42: 1251–1273.

[40] Based on various sources, including vSkinner, J. R. (2014), *Business plan, business reality: Starting and managing your own business in Canada.* Toronto, ON: Pearson Education; Kuratko, D.F. & Welsch, H.P, (2004). *Strategic entrepreneurial growth (2nd ed)*. Mason, OH: South-Western College Publishers; Lasher, W.R. (2005). *The perfect business plan made simple*. New York, NY: Broadway Books.

[41] Much of the information on legal forms is drawn from Ebert, R.J., Griffin, R.W., & Starke, F.A. (2009). *Business essentials: 5th Canadian edition.* Toronto, ON: Prentice-Hall.

[42] Franke, N., Gruber, M., Harhoff, D., Henkel, J. (2008). Venture capitalists' evaluation of start-up teams: trade-offs, knock-out criteria, and the impact of VC experience. *Entrepreneurship Theory and Practice*. 32(3): 459-483.

[43] Much of the following is based on Blank, S., & Dorf, B. (2012). *The startup owner's manual: The step-by-step guide for building a great company*. Pescadero, CA: K&S Ranch Consulting.

[44] The term seems to have first been transferred from its origin in statistics to use in markets and business by Shirky, C. (n,.d.) Power laws, weblogs, and inequality. Accessed July 21, 2017, from http://www.shirky.com/writings/powerlaw_weblog.html), and is summarized here: Unnamed auther (2005, May 5). Profiting from obscurity. *The Economist*. Retrieved from http://www.economist.com/node/3936129#print?Story_ID=3936129. Anderson, C. (2004, Oct 1). The long tail. *Wired*. https://www.wired.com/2004/10/tail/

[45] "It and the six subsequent books have now sold 500 million copies worldwide." Unnamed author(s) (2015, May 17). World's most powerful female entrepreneurs. *Women On Top*. http://womenontopp.com/worlds-most-powerful-female-entrepreneurs-2/

[46] Neary, L. (2015, Sept 19). When it comes to book sales, what counts as a success might surprise you. *NPR*. http://www.npr.org/2015/09/19/441459103/when-it-comes-to-book-sales-what-counts-as-success-might-surprise-you

[47] Honig, B. (2004). See also Gumpert, D.E. (2002). *Burn your businessplan: What investors really want from entrepreneurs*. Needham, MA: Lauson Publishing. Sarasvathy, S.D. (2008). *Effectuation: Elements of entrepreneurial expertise*. Northampton, MA: Edward Elgar Publishing.

[48] cited in Honig (2004).

[49] Brinckmann, J., Grichnik, D., & Kapsa, D. (2010). Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning–performance relationship in small firms. Journal of Business Venturing, 25: 24–40.

[50] Cited in Honig (2004: 268) See page 112 in Matta, N. & Ashkenas, R. (2003). Why good projects fail anyway. *Harvard Business Review*, 8: 109-113.

[51] Henricks, M. (2008, Dec). Do you really need a business plan. *Entrepreneur*. https://www.entrepreneur.com/article/198618

[52] Ladd, T. (2016). Customer development and effectuation: A review of textbooks to teach a contemporary introduction to entrepreneurship. *Management Teaching Review*, 1: 205–210.

[53] Messner, W. (2013). *Making the compelling business case*. London, UK: Palgrave Macmillan.

[54] Skinner (2014).

[55] Gardner, D. (2014, July 3). Business plan competition winners: Where are they now? *Northeast Pennsylvania Business Journal*. http://biz570.com/business-plan-competition-winners-where-are-they-now-1.1712707

[56] Adeigbo, A. (2017, March 26). Why you will love putting your plan into action. *Forbes*. https://www.forbes.com/sites/autumnadeigbo/2017/03/26/why-you-will-love-putting-your-business-plan-into-action/#24dffdd1fe55

[57] Meta-analytic reviews are provided in Sivasubramaniam, N., Liebowitz, S.J., & Lackman, C.L. (2012). Determinants of new product development team performance: A meta-analytic review. *Journal of Product Innovation Management*, 29: 803–820 and Song, M., Podoynitsyna, K., Van Der Bij, H., & Halman, J.I.M. (2008). Success factors in new ventures: A meta-analysis*. *Journal of Product Innovation Management*, 25: 7–27.

[58] Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences*, 51: 222–230.

[59] Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York, NY: W.H. Freeman and Company.

[60] Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences*, 51: 222–230.

[61] Sivasubramaniam, N., Liebowitz, S.J., & Lackman, C.L. (2012). Determinants of new product development team performance: A meta-analytic review. *Journal of Product Innovation Management*, 29: 803–820.

[62] Song et al (2008).

[63] Mayer-Haug, K., Read, S., Brinckmann, J., Dew, N., & Grichnik, D. (2013). Entrepreneurial talent and venture performance: A meta-analytic investigation of SMEs. *Research Policy*, 42: 1251–1273.

[64] Callinan, A. (2015, Aug 11). The one skill that's more important than selling for a startup founder. Entrepreneur, https://www.entrepreneur.com/article/249279. NEF team (2014, July 4). Single entrepreneur versus team: Why teams are important when building a successful business? *New Entrepreneurs Foundation*. http://newentrepreneursfoundation.com/single-entrepreneur-versus-teams-teams-important-building-successful-business/

[65] Mayer-Haug, K., Read, S., Brinckmann, J., Dew, N., & Grichnik, D. (2013). Entrepreneurial talent and venture performance: A meta-analytic investigation of SMEs. *Research Policy*, 42: 1251–1273.

[66] OECD (2017). *Financing SMEs and entrepreneurs 2017*. Paris, France: Organisation for Economic Cooperation and Development.

[67] Mayer-Haug, K., Read, S., Brinckmann, J., Dew, N., & Grichnik, D. (2013). Entrepreneurial talent and venture performance: A meta-analytic investigation of SMEs. *Research Policy*, 42: 1251–1273.

[68] Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31: 387–406.

[69] See Chen, C.C., Greene, P.G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13: 295–316. Eccles, J.S. (1994). Understanding women's educational and occupational choices. *Psychology of Women Quarterly*, 18: 585–609.

[70] Kourilsky, M.L., & Walstad, W.B. (1998). Entrepreneurship and female youth: Knowledge, attitudes, gender differences, and educational practices. *Journal of Business Venturing*, 13: 77–88.

[71] This situation is worsened by the fact that self-efficacy also appears to be more important to women's career decisions than it is to men's; Bandura, A. (1992). Exercise of personal agency through the self-efficacy mechanism. In Schwarzer, R. (ed.), *Self-efficacy: Thought control of action* (pp 3–38). Washington, DC: Hemisphere Publishing Corp. Evidence suggests that women with low entrepreneurial self-efficacy are far more likely to avoid launching a new business than are men with equally low self-efficacy, Wilson, F., Kickul, J., Marlino, D., Barbosa, S.D., & Griffiths, M. D. (2009). An analysis of the role of gender and self-efficacy in developing female entrepreneurial interest and behavior. *Journal of Developmental Entrepreneurship*, 14: 105–119. In other words, it appears that men are more likely to pursue entrepreneurship even when they do not feel prepared for it; whereas, women may not pursue because of their lack of confidence.

[72] At least in the United States, where the study was conducted Brooks, A.W., Huang, L., Kearney, S.W., & Murray, F.E. (2014). Investors prefer entrepreneurial ventures pitched by attractive men. *Proceedings of the National Academy of Sciences*, 111: 4427–4431.

[73] Lee, I.H., & Marvel, M.R. (2014). Revisiting the entrepreneur gender–performance relationship: a firm perspective. *Small Business Economics*, 42: 769–786.

[74] This is based on a recent analysis of GEM data looking at many parts of the world, Jorge, V. (2017, July 3). Feminization of entrepreneurship in developing countries? *Evidence from GEM data [MPRA Paper*]. Retrieved July 13, 2017, from https://mpra.ub.uni-muenchen.de/79997/

[75] Helft, M. (2006, Oct 12). With YouTube, Grad student its jackpot again. *The New York Times*, http://www.nytimes.com/2006/10/12/technology/12tube.html

[76] It is not the case, as many believe, that profit is the only goal that managers can legally pursue. For example, to quote the U.S. Supreme Court: "Modern corporate law does not require for-profit corporations to pursue profit at the expense of everything else, and many do not." Nonetheless, for-profit corporations are legally expected to pursue profit as one of their goals, and perhaps more importantly, the dominant FBL expectation is that profit should be the most important goal of a for-profit organization. Quote found in Stout, L. (2015, updated April 16). Corporations don't have to maximize profits. *New York Times*. Accessed Jan. 7, 2017 at http://www.nytimes.com/roomfordebate/2015/04/16/what-are-corporations-obligations-to-shareholders/corporations-dont-have-to-maximize-profits

[77] Gelles, D. (2015, Aug 21). How the social mission of Ben & Jerry's survived being gobbled up. *New York Times.* https://www.nytimes.com/2015/08/23/business/how-ben-jerrys-social-mission-survived-being-gobbled-up.html?_r=0

[78] Benefit corporations began in 2010, when the state of Maryland changed its corporate law to provide legal support for SET entrepreneurs and managers who do not want to pursue maximum profit in their organizations. Since Maryland legally created benefit corporations, the idea has been spreading – a majority of US states have adopted comparable laws and numerous countries either have or are developing similar legislation (e.g., Australia, Argentina, Chile, Colombia, Canada, and Italy) (see website http://benefitcorp.net/international-legislation. The more that such laws spread, the easier it will be for SET entrepreneurs to acquire funding from traditional sources such as equity financing.

Likewise, the B-Lab is an American nonprofit organization that offers a review and audit service examining how socially and ecologically responsible an organization's practices are. Organizations that meet B-Lab's standards for accountability, transparency, and socio-environmental performance are certified as B Corporations (often shortened to B-corps). The first B-corp certifications were given in 2007 (Kim, S., Karlesky, M.J.m Myers, C.G. & Schifeling, T. (2016, June 17). Why companies are becoming B Corporations. *Harvard Business Review*. https://hbr.org/2016/06/why-companies-are-becoming-b-corporations). By 2017, there were more than 2,000 registered B-corps representing more than 50 countries and 130 different industries (https://www.bcorporation.net/). B-Corp status is voluntary and has no legal authority, but it has become an important part of many organization's identities (e.g., Ben & Jerry's is a B-corp) as a signal of their commitment to a TBL or SET approach. Even more importantly, it is beginning to have an effect on legal structures.

[79] However, there are specialist networks to help sustainable organizations find venture capital. Examples include Cleantech Venture Network, Investor's Circle, and World Resources Institute's New Ventures. Similarly, organizations like Ashoka look for social entrepreneurs to invest in when no one else will. Ashoka works in over 90 countries with over 3,000 social entrepreneurs. In addition, its Youth Venture program as helped about 5,000 teams launch a community-serving organization. See organization webpage at https://www.ashoka.org/en/ashoka%27s-impact.

[80] Crowdfunding is not limited to entrepreneurs, of course. In fact, some crowdfunding organizations are specifically for non-organizational projects. For example, GoFundMe is a platform that allows individuals to raise money for life events or charitable causes. However, the focus of the discussion here is on entrepreneurial uses of crowdfunding.

Crowdfunding is also not limited to SET uses; entrepreneurs of all kinds are using it as other kinds of funding become harder to acquire. Entrepreneurs and other SMEs suffered much higher than normal rates of bankruptcy and failure all around the world for seven years following the global recession of 2008, which caused venture capital investment to move away from small startups. OECD. (2017). *Financing SMEs and entrepreneurs 2017*. Paris, France: Organisation for Economic Cooperation and Development.

[81] Loria, K. (2016, June 6). 3 guys swore they could make gills for humans and raised $800,000, and it should be a cautionary tale for everyone. http://www.businessinsider.com/risks-of-investing-in-crowdfunding-campaigns-2016-6

Endnotes for Chapter 9

[1] Based on interviews and presentations by Shaun Loney, and on the book: Loney, S. (with W. Braun) (2016). *An army of problem solvers: Reconciliation and the solutions economy*. Shaun Loney.

[2] According to Loney (2016: 30), the Northern Store is owned by the North West Company, "a publicly traded company whose quarterly reports do not speak of the diabetes epidemic, Northern unemployment, or community well-being but rather focus on shareholder dividends and strategies to maximize profits."

[3] For informative videos about Meechim, see: https://www.youtube.com/watch?v=fFtVVuRa2jg https://www.youtube.com/watch?v=9CeWRoRQaZk. (Accessed 2017, July 27.)

[4] For an interesting study of the influence of a single industry in a northern community, see Islam, D., & Berkes, F. (2016). Indigenous peoples' fisheries and food security: A case from northern Canada. *Food Security*, 8(4): 815-826.

[5] Page 198 in Robbins, S. P., & Coulter, M. (2003). *Management (7th edition)*. Upper Saddle River, NJ: Prentice-Hall.

[6] From company website: http://31bits.com/about/mission/(Accessed 2017, July 27.)

[7] Cited in Peyrefitte, J., & David, F.R. (2006). A content analysis of the mission statements of United States firms in four industries. *International Journal of Management*, 23 (2): 296-310.

[8] Desmidt, S., Prinzie, A., & Decramer, A. (2011). Looking for the value of mission statements: A meta-analysis of 20 years of research. *Management Decision*, 49: 468-483.

[9] David, M. E., David, F. R., & David, F. R. (2014). Mission statement theory and practice: A content analysis and new direction. *International Journal of Business, Marketing & Decision Science*, 7(1): 95-110.

[10] Baum, J.R., Locke, E.A., & Kirkpatrick, S.A. (1998). A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*, 83: 43-54. Cited in Kirkpatrick, S.A., Wofford, J.C. & Baum, J.R. (2002). Measuring motive imagery contained in the vision statement. *The Leadership Quarterly*, 13: 139-150.

[11] Kirkpatrick et al (2002).

[12] Collins, J.C., & Porras, J. (1991). Organizational vision and visionary organizations. *California Management Review*, 34: 30-52. Cited in Kirkpatrick et al (2002).

[13] After Steven Jobs passed away, the mission statement was changed to read: "Apple designs Macs, the best personal computers in the world, along with OS X, iLife, iWork and professional software. Apple leads the digital music revolution with its iPods and iTunes online store. Apple has reinvented the mobile phone with its revolutionary iPhone and App store, and is defining the future of mobile media and computing devices with iPad." Schlekser, J. (2016, Aug 16). Apple's boring mission statement and what we can learn from it. *Inc*. https://www.inc.com/jim-schleckser/apple-s-boring-mission-statement-and-what-we-can-learn-from-it.html. (Accessed 2017, July 27.)

[14] See company website: http://www.birnbaumassociates.com/mission-vision-values.htm. (Accessed 2006, Oct 16).

[15] Filloon, W. (2017, March 1). McDonald's set its sights on sustainable beef. *CNBC*. http://www.cnbc.com/2017/03/01/mcdonalds-set-its-sights-on-sustainable-beef.html

[16] O'Boyle, T.F. (1998). *At any cost: Jack Welch, General Electric, and the pursuit of profit*. New York, NY: Alfred A. Knopf.

[17] Pages 31 and 162 in Bakke, D.W. (2005). *Joy at work: A revolutionary approach to fun on the job*. Seattle, WA: PVG.

[18] The basic idea of strategic management has a long history related to defeating the enemy. The word strategy comes from the Greek word *strategos*, which was used about 2,500 years ago to refer to a "military commander." One of the most famous historical writings on strategy—called "The Art of War" and written by Sun-Tzu around that time—is still being read by contemporary managers today. Sun, T. (1963). *The art of war* (S.B. Griffith, trans.). Oxford: Oxford University Press. Strategic management is used in all sorts of organizations because it provides a way to answer questions about the direction an organization should take and the ways it should move towards its objectives. It is a tool that can be used by FBL, TBL and SET managers, but usually with different results.

[19] Kauffman, C. M., & Martin, P. L. (2016). Can rights of nature make development more sustainable? Why some Ecuadorian lawsuits succeed and others fail. *World Development*, 92: 130–142.

[20] Wong-Ming Ji, D. J. & Neubert, M. J. (2001). Voices in visioning: Multiple stakeholder participation in strategic visioning. Academy of Management Meetings, Washington DC.

[21] Conventional RBV is described in Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1): 99–120. Natural RBV is described in: Hart, S.L. (1995). A natural resource-based view of the firm. *Academy of Management Review,* 20: 986-1014. Radical RBV is described in Bell, G.G., & Dyck, B. (2011). Conventional resource-based theory and its radical alternative: A less materialist-individualist approach to strategy. *Journal of Business Ethics*, 99(1): 121-130.

[22] See Barney (1991: 106). The definition of resources from a resource-based view is simultaneously very broad and yet may be narrowly related to the idea of acquisitive economics: Resources include "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness" (Barney, 1991: 101).

[23] We have decided to use the term "infrastructural" resources to refer to Barney's (1991) third category, which he calls "organizational resources" – we found it awkward to talk about an organization's organizational resources.

[24] Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99—119; Wernerfelt, B. (1984). A resource based view of the firm. *Strategic Management Journal*, 5: 171-180; Dierickx, I. & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science,* 35(12): 1504-1511.

[25] Ray C. Anderson attributes this observation to David Brower, former Executive Director of the Sierra Club, who quotes his son Ken Brower. Anderson, R.C. (1998). *Mid-course correction: Toward a sustainable enterprise: The Interface Model*. Atlanta, GA: Peregrinzilla Press. Ward, P. & Brownlee, D. (2000). *Rare Earth*. Gottingen, Germany: Copernicus.

[26] Riviere, P. (2003, December). A historic agreement: At last, generic anti-AIDS medicine for sub-Saharan Africa. *Le Monde diplomatique*. http://mondediplo.com/2003/12/19aids. (Accessed 2017, Feb 14).

[27] Dyck, B. & Silvestre, B. (2017). A novel approach to sustainable innovation in an international development context: Lessons from small-scale farms in Nicaragua. *Working paper*, University of Manitoba.

[28] Dyck, B., & Neubert, M. (2010). *Management: Current practices and new directions*. Boston MA: Cengage/Houghton Mifflin.

[29] Dyck, B. (2002). Organizational learning, microfinance, and replication: The case of MEDA in Bolivia. *Journal of Developmental Entrepreneurship,* 7 (4): 361-382.

[30] Indeed, instead of calling these non-substitutable resources, they are called "organizational" resources in Barney, J.B. & Hesterly, W.S. (2008). *Strategic management competitive advantage concepts (2nd ed.).* Upper Saddle River, NJ: Pearson/Prentice Hall.

[31] Smith, C., & Child, J. (1990). *Reshaping work: The Cadbury experience*. New York, NY: Cambridge University Press.

[32] Porter, M.E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors.* New York, NY: Free Press. Porter, M.E. (1985). *Competitive advantage: Creating and sustaining superior performance.* New York, NY: Free Press.

[33] OrganicBiz Staff (2017, Feb 24). Costco works with farmers to increase organic food supply. *OrganicBiz*. http://organicbiz.ca/costco-works-with-farmers-to-increase-organic-food-supply/

While organic-food sales reached nearly 5% of total food sales last year, organic farmland makes up only about 1% of U.S. farm acreage, the newspaper reports. Demand for organic food is growing about 8-11% per year, versus 2-2.5% for overall food sales.

[34] This summary is taken from Dyck & Neubert (2010) and also found in Neubert & Dyck (2014). The original example was originally taken from Hawken, 1993 (see especially pages 62-63). Hawken, P. (1993). *The ecology of commerce: A declaration of sustainability*. New York, NY: HarperBusiness. Gibbs, D., & Deutz, P. (2007). Reflections on implementing industrial ecology through eco-industrial park development. *Journal of Cleaner Production,* 15(17): 1683-1695. Tudor, T., Adam, E., & Bates, M. (2006). Drivers and limitations for the successful development and functioning of EIPs (eco-industrial parks): A literature review. *Ecological Economics,* 61(2-3), 199-207. See also Valero, A., Uson, S., & Costa, J. (2012). Exergy analysis of the industrial symbiosis model in Kalundborg. *Proceedings of ECOS 2012* - the 25th international conference on Efficiency, cost, optimization, simulation and environmental impact of energy systems, June 26-29, 2012, Perugia, Italy. Neubert, M., & Dyck, B. (2014). *Organizational Behavior*. New York: John Wiley & Sons.

[35] Showalter, M. (2016, February 6). Hot air: Democrats work with Big Tobacco and Big Pharma to choke the vaping industry. *Observer.* http://observer.com/2016/06/hot-air-democrats-work-with-big-tobacco-and-big-pharma-to-choke-the-vaping-industry/

[36] This will be discussed in Chapter 10.

[37] Barney, J. B. & Hesterly, W. (1999). Organizational economics: Understanding the relationship between organizations and economic analysis. In S. R. Clegg and C. Hardy (eds.), *Studying organization: Theory and method*, 109–141. London: Sage.

[38] Recall from Chapter 4 that it has been estimated that the $250 billion American beef industry creates $412.5 billion in negative externalities (i.e., $1.00 of revenue in this industry creates $1.65 in negative externalities). Simon, D. R. (2013). *Meatonomics: How the rigged economics of meat and dairy make you consume too much–and how to eat better, live longer, and spend smarter*. Conari Press

[39] 3BL Media. (2017, March 31). Delos™ and Overbury and Morgan Lovell form strategic alliance to integrate health and wellness into the built environment. 3blmedia. http://3blmedia.com/News/Delostm-and-Overbury-and-Morgan-Lovell-Form-Strategic-Alliance-Integrate-Health-and-Wellness

[40] Personal interview with lead author.

[41] When large organizations are unable to find satisfactory suppliers, they may start or purchase an existing supplier. This is called backward integration, and will be discussed in chapter 10.

[42] Gunther, M. (2006). The Green Machine. *Fortune,* 154 (3): 42.

[43] Thompson, D. (2017, June). Why Amazon bought Whole Foods. *The Atlantic.* https://www.theatlantic.com/business/archive/2017/06/why-amazon-bought-whole-foods/530652/

[44] Ballet, J., & Carimentrand, A. (2010). Fair trade and the depersonalization of ethics. *Journal of Business Ethics*, 92(2): 317–30. Reinecke, J., & Ansari, S. (2015). What is a "Fair" price? Ethics as sensemaking. *Organization Science,* 26(3): 867-888.

[45] For a fuller definition of NGO, see http://www.ngo.org/ngoinfo/define.html. (Accessed 2017, July 27.)

[46] Dyck, B., & Manchanda, R. (2017). Sustainable Marketing 2.0: A virtue theory based approach. *Working paper.* University of Manitoba.

[47] Gibbs, D., & Deutz, P. (2007). Reflections on implementing industrial ecology through eco-industrial park development. *Journal of Cleaner Production,* 15(17): 1683-1695. Tudor, T., Adam, E., & Bates, M. (2006). Drivers and limitations for the successful development and functioning of EIPs (eco-industrial parks): A literature review. *Ecological Economics,* 61(2-3): 199-207.

Endnotes for Chapter 10

[1] This case is based on information found in: Denning, S. (2016, March 23). What's behind Warby Parker's success? *Fortune*. https://www.forbes.com/sites/stevedenning/2016/03/23/whats-behind-warby-parkers-success/#6686eb3b411a. Lisa, (2015, Dec. 9). Warby Parker: Disrupting the eyewear industry https://rctom.hbs.org/submission/warby-parker-disrupting-the-eyewear-industry/. Winfrey, G. (2015, May). The mistake that turned Warby Parker into an overnight legend. *Inc*. http://www.inc.com/magazine/201505/graham-winfrey/neil-blumenthal-icons-of-entrepreneurship.html. Burke, K. (2015, April 30). Inside Warby Parker: How vision, mission & culture helped build a billion dollar business. *HubSpot*. https://blog.hubspot.com/marketing/warby-parker-business-lessons#sm.00001l3psp3a3cdoxqdtpog0u6qnt. Veerasamy, V. (2017, Jan 6). How Warby Parker earned word-of-mouth by using storytelling and remarkable experiences (8+ Examples) *ReferralCandy*. http://www.referralcandy.com/blog/warby-parker-marketing-story/

[2] Porter, M.E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors.* New York, NY: Free Press. Porter, M.E. (1985). *Competitive advantage: Creating and sustaining superior performance.* New York, NY: Free Press.

[3] Page 216 in Schermerhorn, J. R. (2000). *Management (7th edition)*. New York, NY: John Wiley & Sons.
[4] Thompson, J. (2013, Nov 27). Why did Patek Philippe create its own quality seal? *WatchTime*. http://www.watchtime.com/wristwatch-industry-news/industry/patek-philippe-create-quality-seal/. (Accessed 2017, Feb 27.)

[5] Although Michael Porter himself argues against simultaneously pursuing both low cost and differentiation strategies because it is a recipe for getting stuck-in-the-middle, other have argued that an integrated low-cost-differentiation strategy may well work: Murray, A.I. (1988). A contingency view of Porter's 'generic strategies. *Academy of Management Review*, 13(3): 390-400.

[6] Porter, M. E., & Kramer, M. R. (1999). Philanthropy's new agenda: Creating value. *Harvard Business Review* (November-December), 121-130; Porter, M. E., & Kramer, M. R. (2011). Creating shared value: How to reinvent capitalism - and unleash a wave of innovation and growth. *Harvard Business Review* (Jan-Feb): 2-17.

[7] Taube, A. (2014, Oct 23). Why Costco pays its retail employees $20 An Hour. Business Insider. http://www.businessinsider.com/costco-pays-retail-employees-20-an-hour-2014-10

[8] Quoted in Nadkarni, S., Chen, T., & Chen, J. (2016). The clock is ticking! Executive temporal depth, industry velocity, and competitive aggressiveness. *Strategic Management Journal*, *37*(6): 1132-1153.

[9] Haanaes, K., Michael, D., Jurgens, J., & Rangan, S. (2013). Making sustainability profitable. *Harvard business review*, 91(3): 110-115.

[10] This section draws from Bell, G., Dyck, B. & Neubert, M. J. (forthcoming). Ethical leadership, virtue theory and generic strategies: When the timeless becomes timely. In Robert A. Giacalone and Carole L. Jurkiewicz (eds.). *Radical Thoughts on Ethical Leadership.* Charlotte, NC: Information Age Publishing.

[11] Turiera, T., & Cros, S. (2013). *Co-business: 50 examples of business collaboration*. Barcelona, Spain: Infonomia/Zero Factory SL.

[12] Gates, B. (2007, June 7). Remarks of Bill Gates: Harvard commencement (text as prepared for delivery). *Gazette Online.* http://www.news.harvard.edu/ gazette/2007/06.14/99-gates.html

[13] See website: http://www.winduppradio.com/trevor.htm (Accessed 2017, July 27.)

[14] For a list of such organizations, see http://www.ciwmb.ca.gov/Tires/Products/ (Accessed 2006, Oct 31.)

[15] Szaky, T. (2013). *Revolution in a bottle: How TerraCycle is redefining green business*. Toronto, ON: Penguin.

[16] Allen, N., & Knight, M. (2011). Recycling the world's trash into cash. *CNN*. http://www.cnn.com/2011/10/10/world/americas/terracycle-recycling-waste-szaky/index.html

[17] Bell, Dyck & Neubert (forthcoming).

[18] Bertrand, N. (2015, February 10). The inspiring story behind the brownies in Ben & Jerry's most popular flavors. *Business Insider*. http://www.businessinsider.com/ben-and-jerrys-greyston-bakery-workers-2015-2. Zsolnai, L. (2015). Post-materialistic business models. *Post-materialistic business: Spiritual value-orientation in renewing management* (pp. 46-77). Houndsmills, UK: Palgrave Macmillan UK.

[19] Asheim, B., Cooke, P., & Martin, R. (2006). The rise of the cluster concept in regional analysis and policy. In B. Asheim, P. Cooke & R. Martin (Eds.). *Clusters and regional development: Critical reflections and explorations* (pp. 1-29). London, UK: Routledge.

[20] Bell, Dyck & Neubert, M. J. (forthcoming).

[21] See page 36 in General Electric Annual Report, 2015. https://www.ge.com/ar2015/assets/pdf/GE_AR15.pdf

[22] Ebert, R.J., Griffin, R., Starke, F.A. (2009). *Business essentials*. Toronto, ON: Pearson Prentice-Hall.

[23] Henderson, B.D. (1979). *Henderson on corporate strategy*. Cambridge, MA: Abt Books. Cited in Hambrick, D.C., MacMillan, I.C. Day, D.L. (1982). Strategic attributes and performance in the BCG matrix--A PIMS-based analysis of industrial product businesses. *Academy of Management Journal,* 25(3): 510-531.

[24] Morrison, A., & Wensley, R. (1991). Boxing up or boxed in?: A short history of the Boston Consulting Group share/growth matrix. *Journal of Marketing Management*, *7*(2): 105-129.

[25] Anderson, C.R., & Zeithaml, C.P. (1984). Stage of the product life cycle, business strategy, and business performance. *Academy of Management Journal*, 27(1): 5-24.

[26] For example, among the various companies owned by Elon Musk, Tesla can be considered a star in the fully electric car market. Shahan, Z. (2016, April 9). Tesla takes 30% of US electric car market in March, brings in 30x more Model 3 reservations than entire US electric car market. *Clean Technica.* https://cleantechnica.com/2016/04/09/tesla-takes-30-of-us-electric-car-market-in-march-brings-in-30x-more-model-3-reservations-than-entire-us-electric-car-market/

[27] Many of the examples from Apple in this discussion of BCG are drawn from Kasi, A. (2016, Oct 7). BCG Matrix for Apple Inc. http://bcgmatrixanalysis.com/bcg-matrix-for-apple-inc/

[28] Rexaline, S. (2017, Jan 9). After 10 years, the iPhone is still Apple's cash cow. *Benzinga* https://www.benzinga.com/general/education/17/01/8884102/after-10-years-the-iphone-is-still-apples-cash-cow

[29] Pets were later re-named dogs, but the name pets is coming back in fashion. Morrison, A., & Wensley, R. (1991). Boxing up or boxed in?: A short history of the Boston Consulting Group share/growth matrix. *Journal of Marketing Management*, *7*(2): 105-129. Martin, M. (2016, Dec 28). What is a BCG Matrix? *Business News Daily.* http://www.businessnewsdaily.com/5693-bcg-matrix.html

[30] It may therefore fail to account for operating synergies among an organization's different divisions. Armstrong, J.S. (1996). Management folklore and management science: on portfolio planning, escalation bias, and such. *Interfaces*, 26 (July– Aug): 25–55.

[31] This figure draws heavily from Dyck, B., & Neubert, M. (2010). *Management: Current practices and new directions*. Boston MA: Cengage/Houghton Mifflin. See also Duica, A., Croitoru, G., Duica, M.C., & Robescu, O. (2014). The rise and fall of the B.C.G. model. *Proceeding of the 8th International Management Conference*, November 6th-7th, Bucharest, Romania.

[32] Though wind power is also not without problems, such as birds being killed by the fast-moving blades.

[33] Dyck, B. (1997). Understanding configuration and transformation through a multiple rationalities approach. *Journal of Management Studies*, 34: 793-823.

[34] Adapted from Pascale, R.T. (1984). Perspectives on strategy: The real story behind Honda's success. *California Management Review,* 26: 47-72.

[35] Pascale (1984).

[36] Mintzberg, H. (1987). Crafting strategy. *Harvard Business Review,* July-August: 66-75.

[37] This is the kind of "brain" described by Durkheim, E. (1958). *Professional ethics and civic morals* (C. Brookfield, trans.). Glencoe, IL: Free Press. Extending this metaphor even further, a FBL approach is akin to the brain deciding that the body should run a marathon and then is surprised when the body is unable. A TBL/SET approach is more sensitive to the needs and capacity of the body, and to develop them appropriately, before running any marathon.

[38] A series of articles characterizing the debate between the process school and the design school published in *California Management Review*, 34(4 Summer): 78-117 under "The 'Honda Effect' Revisited." These include: Mintzberg, H. (1996). Introduction. *California Management Review*, 38 (4) (Summer): 78-79. Mintzberg, H. (1996). Learning 1, Planning 0. *California Management Review,* 38 (4) (Summer): 92-93. Goold, M. (1996). Design, learning and planning: A further observation on the design school debate. *California Management Review,* 38 (4) (Summer): 94-95. Mintzberg, H. (1996). Reply to Michael Goold. *California Management Review,* 38 (4) (Summer): 96-99. Goold, M. (1996). Learning, planning, and strategy: Extra time. *California Management Review,* 38 (4) (Summer): 100-102. Rumelt, R.P. (1996). The many faces of Honda. *California Management Review*, 38 (4) (Summer): 103-111. Pascale, R.T. (1996). Reflection on Honda. *California Management Review,* 38 (4) (Summer): 112-117.

[39] See empirical data reported in Dyck, B. (2007). Competing rationalities in management practice and management education. Presentation at the Academy of Management, Philadelphia, PA.

[40] Patel, S. (2016, Dec 6). 10 smart entrepreneurs that diversified with multiple income streams. *Inc.* https://www.inc.com/sujan-patel/10-smart-entrepreneurs-that-diversified-with-multiple-income-streams.html

[41] Based on advice in Osterwalder, A., Pigneur, Y. Bernarda, G. & Smith, A. (2014). *Value Proposition design*. Hoboken, NJ: John Wiley & Sons, Inc.

[42] Read Sarasvathy, S., Dew, N., Wiltbank, R., & Ohlsson, A.V. (2010). *Effectual entrepreneurship*. New York, NY: Routledge.

[43] Streitfeld, D. (2017, May 20). 'The Internet is broken': @ev is trying to salvage it. *New York Times.* https://www.nytimes.com/2017/05/20/technology/evan-williams-medium-twitter-internet.html

[44] McGee, J. (2017, June 6). Advice to entrepreneurs from former Twitter engineer: Diversify. *Tennessean.* http://www.tennessean.com/story/money/2017/06/06/nas-corporatevc/354749001/

Endnotes for Chapter 11

[1] Description taken from: Kastelle, T. (2013, Nov 13). Hierarchy is overrated. Harvard Business Review. https://hbr.org/2013/11/hierarchy-is-overrated?utm_source=feedburner&utm_medium=feed&utm_campaign=feed:%20harvardbusiness%20(hbr.org)&cm_ite=dailyalert-112113%20(1)&cm_lm=sp:&cm_ven=spop-email; Rees-Mogg, M. (2015, Dec 10; updated 2016, Mar 21). Business Leaders: Ricardo Semler. Startups. http://startups.co.uk/business-leaders-ricardo-semler/. "Ricardo Semler: The radical boss who proved that workplace democracy works. (2016, May). Mallen Baker's Respectful Business Blog. http://mallenbaker.net/article/inspiring-people/ricardo-semler-the-radical-boss-who-proved-that-workplace-democracy-works; Semler, R. (2004). The seven-day weekend. New York NY: Portfolio/Penguin Group; Semler, R. (1989). Managing without managers. Harvard Business Review, Sept/Oct: 76-84; Vogl, A.J. (2004). The anti-CEO. Across the Board, May/June. pp 30-36. This case borrows heavily from Dyck, B., & Neubert, M. (2010). Management: Current practices and new directions. Boston MA: Cengage/Houghton Mifflin.

[2] Semler (1989: 77).

[3] Rees-Mogg, (2015),

[4] Semler (2004: 12).

[5] Semler (2004: 92).

[6] Because of its focus on the organization's overall goals and performance standards, this component can be seen as loosely related to the management function of planning.

[7] This component may be most closely related to the first part of the organizing function, namely assigning tasks and creating organizational relationship to facilitate meeting organizational goals.

[8] This component is somewhat related to the leading function.

[9] This fundamental is somewhat related to the function of controlling.

[10] This quote, and the reference to Frank Lloyd Wright, are taken from Orr, D. (2006). Design: Part I. *Geez*, Summer, Issue 3: 8.

[11] Kruft, H.-W. (1994). *A history of architectural theory from Vitruvius to the present* (trans. by R. Taylor, E. Callander, A. Wood). (London: Zwemmer).

[12] Dyck and Weber (2006) explicitly examined the relative emphasis that managers place on materialism and individualism. They found that managers who placed more emphasis on materialism and individualism placed more emphasis on standardization, specialization, centralization, formalization, and less emphasis on experimentation, sensitization, dignification and participation. And they found that managers who placed less emphasis on materialism and individualism placed less emphasis on standardization, specialization, centralization, formalization, and more emphasis on experimentation, sensitization, dignification and participation. Dyck, B., & Weber, J.M. (2006). Conventional versus radical moral agents: An exploratory empirical look at Weber's moral-points-of-view and virtues. *Organization Studies*, 27(3): 429-450. See also Dyck, B., & Schroeder, D. (2005). Management, theology and moral points of view: Towards an alternative to the conventional materialist-individualist ideal-type of management. *Journal of Management Studies*, 42 (4): 705-735.

[13] This SET emphasis on process and relational competence is consistent with Mintzberg's notion of "strategic learning" discussed in the previous chapter. The SET approach does not see a lack of formal

structure as a weakness to be overcome, but rather embraces it as a hallmark of an appropriate way to manage the organizing function process.

[14] Usually when we think of standards, we think of formal standards. The more written documentation there is, the higher the degree of formalization. This is particularly evident in very bureaucratic organizations like McDonalds. For example, informal standards are evident in the classroom when students don't walk out in the middle of class, when they turn off their smart phones, when they ask questions by raising their hands, and so on. In management classes that follow a TBL approach, there may be additional informal norms, such as students bringing their coffee or water in re-usable beverage containers, or a standard that lectures regularly differentiate between different approaches to management. Such informal standards are often not formally written into course outlines because they are part of the "culture" or informal expectations of university students and professors. In this way, part of the role of organizational culture is to provide standards for members' behavior. Research suggests that there is a link between formalization and organizational values, showing that an increase in formalization is a barrier to trust (in individualistic countries). Huang, X., & Van de Vliert, E. (2006). Job formalization and cultural individualism as barriers to trust in management. *International Journal of Cross Cultural Management*, 6(2): 221-242.

[15] Charles Snow is confident that Lincoln Electric is an example of a Defender type (Ketchen, D. J. (2003). An interview with Raymond E. Miles and Charles C. Snow. *The Academy of Management Executive*, *17*(4), 97-104). The details of Lincoln Electric in this paragraph were drawn from Carmichael, H.L. & MacLeod, W.B. (2000). Worker cooperation and the ratchet effect. *Journal of Labor Economics*, 18(1):1-19. The description in this paragraph is drawn from Dyck and Neubert (2010).

[16] Dyck, B. & Silvestre, B. (2017). A novel approach to sustainable innovation in an international development context: Lessons from small-scale farms in Nicaragua. *Working paper,* University of Manitoba.

[17] For example, when McDonalds opened its first branch in Moscow, it discovered that local farmers could not provide the high-quality potatoes needed to meet McDonalds standards. So, McDonalds flew in experts, imported the appropriate seeds and harvesting machinery, and trained Russian farmers how to grow and harvest the potatoes it needed. The Russians who were hired to manage the Moscow branches were trained in Canada and at "Hamburger University" in Chicago

[18] Martin, D. & Schouten, J. (2012). *Sustainable marketing.* Boston: Prentice-Hall.

[19] In many ways, sensitization is similar to SET intrapreneurship (see chapter 5). For example, because they are becoming more sensitive to the lack of economic opportunities for inner-city kids, an increasing number of universities are following an innovative entrepreneurship "summer camp" program developed at the Asper School of Business at the University of Manitoba to develop campers' entrepreneurial skills. At a societal level, more people are becoming sensitized to improve global justice as is evident in ethical mutual funds and an increased emphasis on corporate social responsibility. Sensitized managers who are unable to have their concerns addressed in-house may resort to whistle-blowing or join or start more SET organizations -- see Badaracco, J.L. Jr., & Webb, A. (1995). Business ethics: A view from the trenches. *California Management Review*. 37: 2, 8-28.

[20] Dwyder, A. (2016, Aug.). With hot-desking, not all employees are sitting pretty. *The Globe and Mail.* https://www.theglobeandmail.com/report-on-business/economy/growth/with-hot-desking-not-all-employees-are-sitting-pretty/article31341203/

[21] "The sustainability officer sets policy, goals and objectives to assure that the corporation maintains and even exceeds productivity and profitability, and meets or exceeds environmental policy." According to unnamed author(s) (n.d.). What is a sustainability officer. *Sokanu*. https:/www.sokanu.com/careers/sustainability-officer/

[22] O'Brien-Bernini, F. (2017, June 1). The 9 (or 10) keys to successful sustainability leadership. Greenbiz. Adapted from commencement address at Furman University. https://www.greenbiz.com/article/9-or-10-keys-successful-sustainability-leadership

[23] Of course, the reverse is also true. An organization with diffuse authority may have a department with concentrated authority if the department head insists on making all the major and minor decisions for the department. Finally, the organization and its sub-units can both be centralized, or both be decentralized.

[24] Buber, M. (1958). *I and thou*. New York: Scribner.

[25] Dyck, B. (2002). A grounded, faith-based moral point of view of management. In Teresa Rose (Ed.), *Proceedings of Organizational Theory Division*, 23: 12-23. Administrative Sciences Association of Canada, Winnipeg, MB.

[26] Cooper, C., Dyck, B., & Frohlich, N. (1992). Improving the effectiveness of gainsharing: The role of fairness and participation. *Administrative Science Quarterly*, 37: 471-490.

[27] This description draws heavily form Dyck and Neubert (2010). Dignity may be present in SET (and in TBL and FBL) organizations when members are encouraged to decorate their offices with personal touches and are given discretion in setting work hours to permit them to attend, for example, a special program at their children's school. There is a big difference between asking one's manager for permission to leave work early to attend a special event, versus letting the manager know about one's plan to leave early and explaining how the hours lost will be replaced. In our technological and globalized world, there is a tendency to treat people as numbers rather than as people.

[27] Dyck, B. (2002). A grounded, faith-based moral point of view of management. In Teresa Rose (ed.), *Proceedings of Organizational Theory Division*, 23: 12-23. Administrative Sciences Association of Canada, Winnipeg, MB.

[28] Semler (2004: 179). Semler talks about trusting employees to choose their own hours: "People from CNN were at my company last week to do a special. They spent five days going through the whole company. We told them, 'Interview anybody you want—nobody will chaperone you.' The CNN people showed up on the first working day after Carnival, and went through entire floors without seeing a single person. 'Where were all the people?' they asked. But later, after interviewing, they calculated that our employees worked more hours than their counterparts at other companies. Which goes to say that when people are given freedom, they'll do whatever it takes to get the job done." (quoted in Vogl, 2004: 34)

[29] Bakke, D. W. (2005). *Joy at work: A revolutionary approach to fun on the job*. Seattle, WA: PVG.

[30] Bakke (2005: 68, 70, 71).

[31] This is a point made by Benefiel (2005).

[32] In the end, the same people might work in each organization, but how they are grouped together depends on the departmentalization of the organization. However, this is not to suggest that departmentalization is not important. Quite the contrary. The structures that we inhabit influence how we see the world and the work that we do. The difference is not unlike the difference between taking a university course with students from a wide variety of academic disciplines versus taking the same course with students who are all in the same discipline.

[33] In January 2001, under the leadership of CEO Joergen Centerman and facilitated by advances in information technology, ABB began to transform its matrix into a "customer-centric" model, becoming one of the first organizations in its industry to align its structure with the structures of its customers and channels to the market. The new model had four divisions based on customers, supported by two generic product divisions. This description of ABB's structure is taken from Fitzgerald, S.P. (2002). *Organizational models*. Oxford UL: Capstone Publishing.

[34] Kasperkevic, J. (2015, May 8). Obama at Nike headquarters: Why push trade deal at outsourcing giant? *The Guardian*. https://www.theguardian.com/us-news/2015/may/08/obama-nike-free-trade-deal-sanders Soni, P. (2014, Dec 2). An overview of Nike's supply chain and manufacturing strategies. *Market*

Realist. http://marketrealist.com/2014/12/overview-nikes-supply-chain-manufacturing-strategies/Page 307 in Hellriegel, D., Jackson, S.E., & Slocum, J.W. (2002). *Management: A competency-based approach (9th edition).* Cincinnati, Ohio: Thomson South-Western.

[35] The advantages or relatively small organizational subunits and organizations are also described in Dyck & Schroeder (2005).

[36] Semco Style Institute. (2014, Dec 14). Get in line – or why you don't need strategy. *Semco.* https://semcostyle.org/articles/2016/12/get-in-line-or-why-you-don-t-need-strategy

[37] Zode, P. (2015, Dec 21). SEMCO—A maverick organization. https://www.slideshare.net/prameyzode/semco-a-maverick-organisation

[38] Roofthooft, W. (2015). Alternative organization models for the services business. *FMI*IGF E-Journal*. http://www.fmi.ca/resources/fmi-igf-journal/e-journal-july-2015/alternative-organization-models-for-the-services-business/

[39] This is illustrated by Semco's "Lost in Space" program, which might be better named "Exploring Space" because it gives new members and managers the opportunity to sensitively match skills with jobs. By fostering and welcoming members to act upon areas where they think improvement is possible, members will experience a greater feeling of purpose and meaningful work. Programs like this reduce the chance that members will leave the organization because of feelings that their manager does not respect their sensitivities (Badaracco, J. L., & Webb, A. P. (1995). Business ethics: A view from the trenches. *California Management Review*, *37*(2), 8-28). It is desirable when organizational stakeholders can work together to improve and gradually shift the overall goals of the organization and how they are met. Thus, whereas goal displacement is seen as a bad thing when it comes from an too narrow specialization, it can be seen to have positive aspects when it comes from an appropriate emphasis on SET sensitization.

[40] Semler (2004: 25).

Endnotes for Chapter 12

[1] Some of the details in this case have been disguised. It is based on a presentation by the protagonist. The case draws heavily Dyck, B., and M. Neubert, (2010). *Management: Current practices and new directions.* Boston MA: Cengage/Houghton Mifflin.

[2] This idea of fit draws heavily from contingency and configuration theory approaches to organization design. Child, J. (1972). Organizational structure, environment, and performance: The role of strategic choice. *Sociology*, 6: 1-22). Meyer, A.D., Tsui, A.S., & Hinings, C.R. (1993). Configurational approaches to organizational analysis. *Academy of Management Journal*, 36: 1175-1195. Walker, K., Ni, N., & Dyck, B. (2015). Recipes for successful sustainability: empirical organizational configurations for strong corporate environmental performance. *Business Strategy and the Environment*, 24(1): 40-57. Dyck, B. (1997). Understanding configuration and transformation through a multiple rationalities approach. *Journal of Management Studies*, 34 (5): 793-823.

[3] Schein, E. H. (1985). *Organizational culture and leadership: A dynamic view*. San Francisco, CA: Jossey Bass.

[4] Note that our discussion of FBL organization structure builds on the work of Burns, T. & Stalker, G.M. (1966). *The management of innovation (2nd ed.),* Tavistock Publications: London. The discussion in this section also draws heavily from Dyck and Neubert, 2010.

[5] For more on relationship between organic-mechanistic and functional/divisional, see Burns, T., & Stalker, G. M. (1961). *The management of innovation*. London: Tavistock. Jundt, D. K., Ilgen, D. R., Hollenbeck, J. R., Humphrey, S. E., Johnson, M. D., & Meyer, C. J. (2004). The impact of hybrid team structures on performance and adaptation: Beyond mechanistic and organic prototypes. *Working paper*, Michigan State University.

[6] Donaldson, L. (1999). The normal science of structural contingency heory. In S. R. Clegg & C. Hardy (eds.)

Studying organizations: Theory and method (pp 51-70). London: SAGE Publications.

[7] Note two caveats of this mechanistic-organic continuum. First, in actual practice there will be exceptions to the tendency for the four fundamentals to appear exactly in the way that they are shown on the continuum. New ventures, for example, may have a highly concentrated centralization (e.g., the entrepreneur makes all the decisions) and non-prescribed standardization and low specialization (e.g., the entrepreneur does everything "on-the-fly" and develops policies only on an "as needed" basis). Also, some start-up organizations may require a highly prescribed standardization because they are operating in highly regulated industries or because of demands of key customers. Other exceptions to the continuum may be in departmentalization, where large mechanistic organizations may have divisional departmentalization and smaller organic organizations may well adopt functional departments.

Second, although thinking about the mechanistic-organic structure along a continuum has proven to be both elegant and useful, scholars have noted that some of its dimensions may be over-simplified. For example, rather than place concentrated and diffuse centralization on opposite ends of a *single* continuum, it may be more accurate to have two separate scales, where an organization could conceivable be seen to be getting simultaneously more centralized and decentralized. This might occur if decision-making authority was removed from middle-management with some of it going to lower-level managers (diffuse centralization) and some of it going to top managers (concentrated centralization). For more on this, see Cullen, J.B., & Perrewe, P.L. (1981). Decision making configurations: An alternative to the centralization/decentralization conceptualization. *Journal of Management*, 7 (2): 89-103.

[8] Malbašić, I., Rey, C., & Potočan, V. (2015). Balanced organizational values: From theory to practice. *Journal of Business Ethics*, *130*(2), 437-446.

[9] For more on the competing values framework, see Cameron, K. S. & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework* (3rd ed.). San Francisco, CA: Jossey-Bass. See also Giberson, T. R., Resick, C. J., Dickson, M. W., Mitchelson, J. K., Randall, K. R., & Clark, M.A. (2009). Leadership and organizational culture: Linking CEO characteristics to cultural values. *Journal of Business Psychology*, (*24):* 123–137; Hartnell, C.A., Ou, A.Y., & Kimicki, A. (2011). Organizational culture and organizational effectiveness: A meta-analytic investigation of the competing values framework's theoretical suppositions. *Journal of Applied Psychology*, *96*(4), 677–694; Quinn, R. E., Spreitzer, G. M. (1991). The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on the quality of life. In R. W. Woodman & W. A. Pasmore (Eds.), *Research in Organizational Change and Development* (pp. 115–158). Greenwich, CT: JAI Press.

[10] The SET organizing continuum is similar to, but also different from the FBL mechanistic-organic continuum. The same caveats apply here that apply to the mechanistic-organic continuum. First, there will be exceptions to the tendency for managers to place their emphasis across each of the four SET fundamentals of organizing either internally or externally. For example, a manager may be very sensitive to *external* stakeholders, but emphasize *internal* experimentation, dignification and experimentation. Second, rather than use a single continuum it may be more accurate to offer two separate scales for each of the four dimensions so that, for example, dignification could be high (or low) *both* internally and externally. However, as with the mechanistic-organic structures, we will see that the elegance and parsimony of the internal-external focus distinction is useful for understanding SET organization design and organizational types.

[11] This figure builds on Dyck & Neubert (2010), and Neubert, M., & Dyck, B. (2014). *Organizational Behavior*. New York: John Wiley & Sons.

[12] Srilekha, V., & Rao, U. S. (2016). Distributor motivations in joining network marketing company, AMWAY. *Imperial Journal of Interdisciplinary Research*, *2*(11): 2042-2049. With revenues of $9.5 billion and 19,000 employees, in 2015 Forbes ranked Amway as #29 of America's Largest Private Companies (https://www.forbes.com/companies/amway/)

[13] See company website: https://www.botanicalpaperworks.com

[14] A FBL or TBL management clan would seek the financial benefits of, for example, reduced turnover costs among members. In contrast, a SET management clan would emphasis benefits of treating one another with dignity that defy financial measurement.

[15] Abrams, R. & Sattar, M. (2017, Jan 22). Protests in Bangladesh shake a global workshop for apparel. *New York Times.* https://www.nytimes.com/2017/01/22/business/bangladesh-protest-apparel-clothing.html. Burke, J. (2015, April 22). Bangladesh garment workers suffer poor conditions two years after reform vows. *The Guardian.* https://www.theguardian.com/world/2015/apr/22/garment-workers-in-bangladesh-still-suffering-two-years-after-factory-collapse

[16] Mandarino, K. (2016). Niche brands: Understanding how niche fashion start-ups connect with Millennials. *Wharton School*, University of Pennsylvania Scholarly Commons. Retrieved from http://repository.upenn.edu/joseph_wharton_scholars/9/?utm_source=repository.upenn.edu%2Fjoseph_wharton_scholars%2F9&utm_medium=PDF&utm_campaign=PDFCoverPages. Cattermole, A. (2016). Transparency is the New Green. *AATCC Review*, *16*(1): 42-47. American Association of Textile Chemists & Colorists. Evans, E. A. (2016). Globalized garment systems: Theories on the Rana Plaza Disaster and possible localistrResponses. *Western Washington University Masters Thesis*. Retrieved from http://cedar.wwu.edu/cgi/viewcontent.cgi?article=1489&context=wwuet&sei-redir=1&referer=https%3A%2F%2Fscholar.google.ca%2Fscholar%3Fstart%3D10%26q%3Deverlane%26hl%3Den%26as_sdt%3D0%2C5%26as_ylo%3D2016#search=%22everlane%22. Also, see company website: https://www.everlane.com

[17] An FBL management hierarchy would tend to have concentrated centralization and emphasize financial efficiencies, whereas an SET management hierarchy would emphasize collaborative decision-making and socio-ecological efficiencies.

[18] Smith, O. (2016, April 25). Inside secretive iPhone factory with safety nets 'to stop workers killing themselves'. *Express.* http://www.express.co.uk/news/uk/664296/secretive-iPhone-factory-safety-nets-stop-suicides-Apple-Petagron

[19] Eisler, M.N. (2016). A Tesla in every garage?: How not to spark an electric vehicle revolution. *IEEE Spectrum*, *53*(2): 34-55.

[20] An FBL management adhocracy would tend to emphasize instrumental goals, whereas a SET management adhocracy would emphasize sustainable innovations that enhance ecological and community well-being.

[21] Oldfather, J., Gissler, S., & Ruffino, D. (2016). *Bank complexity: Is size everything?* Board of Governors of the Federal Reserve System (US). https://www.federalreserve.gov/econresdata/notes/feds-notes/2016/bank-complexity-is-size-everything-20160715.html

[22] While Goldman Sachs may have a high reputation among hedge funds and institutional investors, it has a very low overall reputation among the general public in terms of social responsibility, vision and leadership, workplace environment, emotional appeal, products and services, and financial performance according to Harris Poll data. Goldman Sachs ranked as the company with the 6th worst reputation in Comen, E., & Sauler, M.B. (2016, May 12). Companies with the best (and worst) reputations. *24/7WallSt*. http://247wallst.com/special-report/2016/05/12/companies-with-the-best-and-worst-reputations-4/

[23] See company website: https://www.habitat.ca

[24] An FBL market culture would tend to focus on financial performance goals, whereas an SET market culture would emphasize socio-ecological goals.

[25] Usher, J.M., & Evans, M.G. (1996). Life and death along gasoline alley: Darwinian and Lamarckian processes in a differentiating population. *Academy of Management Journal*, 39(5): 1428-1466.

[26] However, FBL, TBL and SET approaches generally agree that there is not one best way to manage stable and unstable environments vis a vis the SET management internal focus-external focus continuum.

[27] All three approaches to management are particularly interested in markets where there is greater demand than supply, and are somewhat ambivalent regarding how to manage un/munificent environments with regard to the mechanistic-organic continuum.

[28] For example, when a broad cross-section of motorists begins to desire environmentally-friendlier forms of transportation, then it is possible to provide integrated solutions like hydrogen fuel cells, improved public transportation, and bicycle paths. The expensive infrastructure that must be developed requires a broad base of interested drivers. However, when only a small portion of society is seeking multiple forms of well-being, then managers must rely on smaller specialty or niche markets characterized by an internal-focus. This is illustrated by bicycle shops that recondition old bikes, and organizations like CarShare and ZipCar that enable members to share cars because they do not need them 24-hours-a-day/7-days-a-week.

[29] Once firms like Tesla increase the munificence of the environment, other manufacturers are sure to enter, which both nurtures further munificence (e.g., by enhancing infrastructure and legitimacy) while taking market share. The Grameen Bank may be seen as an example of a SET organization that helped has to develop a technology and munificent market (microfinancing) where others have been quick to enter.

[30] Givens, K. D., & McNamee, L. G. (2016). Understanding what happens on the other side of the door. Emotional labor, coworker communication, and motivation in door-to-door sales. *Journal of Ethnographic & Qualitative Research*, *10*(3): 165-179.

[31] See company website: http://www.benjerry.com/greyston

[32] Pfeffer, J., & Salancik, G. (1978). *The external control of organizations: A resource dependence perspective.* New York, NY: Harper and Row.

[33] Godelnik, R. (2012, May 18). 5 Reasons why Apple's CSR Strategy doesn't work. *TriplePundit: People, planet, profit.* http://www.triplepundit.com/2012/05/5-reasons-apples-csr-strategy-doesnt-work/. Warren, E. (2016, Sept 8). What Apple teaches us about taxes. *New York Times.* https://www.nytimes.com/2016/09/08/opinion/elizabeth-warren-what-apple-teaches-us-about-taxes.html?emc=edit_th_20160908&nl=todaysheadlines&nlid=50700384&_r=1. Barboza, D. (2016, Dec 29). How China built 'iPhone City' with billions in perks for Apple's partner. *New York Times*. https://www.nytimes.com/2016/12/29/technology/apple-iphone-china-foxconn.html?emc=edit_th_20161229&nl=todaysheadlines&nlid=50700384&_r=0

[34] Vij, A. (2016, May 19). How 3M makes money? Understanding the 3M business model. *Revenues and Profits*. https://revenuesandprofits.com/understanding-3m-business-model/

[35] FBL, TBL and SET approaches generally agree that there is no one best way to manage task analysability vis a vis the internal focus vs. external focus continuum.

[36] The internal focus structure allows them to become familiar with and gain confidence in using SET management principles more generally. Benefiel, M. (2005). *Soul at work*. New York, NY: Seabury Books.

[37] Woodward, J. (1965). *Industrial organizations: Theory and practice.* London: Oxford University Press. Woodward, J. (1958) *Management and technology.* London: Her Majesty's Stationery Service.

[38] Though not as mechanistic as routine technology

[39] Our analysis here adapts and builds on the best-known framework describing four types of organization design, developed forty years ago Raymond Miles and Charles Snow. Much of this discussion draws from and builds on the typology developed by Miles and Snow (1978), which has been the most enduring, scrutinized and used of numerous strategy classification systems introduced over the past three decades (Hambrick, 2003). Their typology is sometimes used to describe different *strategic* organizational types—and its overlap with Porter's strategic types is well-accepted—but the deeper merit of their typology is its *comprehensive* nature, spanning organization structure, strategy, environment and technology (Ghoshal, 2003; Ketchen, 2003). Ghoshal, S. (2003). Miles and Snow: Enduring insights for managers. *Academy of Management Executive*, 17(4): 109-114. Hambrick, D.C. (2003). On the staying power of defenders, analyzers and prospectors. *Academy of Management Executive*, 17(4): 115-118. Ketchen, D.J. (2003). An interview with

Raymond E. Miles and Charles C. Snow. *Academy of Management Executive*, 17(4): 97-104. Miles, R.E., & Snow, C.C. (1978). *Organizational strategy, structure, and process*. New York, NY: McGraw-Hill.

[40] The simple organization design type may be organic simply because managers do not have the need or ability to create a well-developed mechanistic structure. Think of an entrepreneur who starts up a new organization in a garage or home office. This organization starts with one person, so there is little need for developing written guidelines or job descriptions. The job description of the lone entrepreneur is to do everything, and to work as a one-person profit-center. The entrepreneurs who manage such simple organizations have identified what they believe is an opportunity in a changing environment, and are eager to demonstrate the viability of their new venture to make a profit and to attract investors. Their strategy is to focus on a particular segment of the market, where they offer their differentiated new-and-improved product or service (e.g., "a better mouse-trap"), or offer low-cost products or services (e.g., thanks to their lower overhead and operating costs). Managers often rely on their tacit knowledge to invent and fine-tune the unique technology required for producing and delivering their product or service.

[41] *31 bits* could also be described as having a Transformer strategy, particularly in how it transforms the lives of its Ugandan jewelry makers.

[42] Stereotypical FBL Prospectors have an organic structure, characterized by departmentalization that has many different relatively independent divisions that act as profit centers. In FBL Prospector organizations, decision-making authority is diffuse at the level of the profit center or lower, standardization is not very prescribed, and specialization is broad to permit people to adapt to change and do what is needed. Managers in Prospector organizations see their environment as changing and, because of their desire to develop new products and new markets, top managers often have a background in marketing and research & development.

[43] Eisler, M.N. (2016). A Tesla in every garage?: How not to spark an electric vehicle revolution. *IEEE Spectrum*, 53(2): 34-55.

[44] Merie, R. (2016, May 4). Why Goldman Sachs suddenly wants to work for average people. *The Washington Post*. https://www.washingtonpost.com/business/economy/why-goldman-sachs-suddenly-wants-to-work-for-average-people/2016/05/04/ca003336-10a6-11e6-8967-7ac733c56f12_story.html?utm_term=.6cad6ac904b5. Kar, I. (2015, May 10). There's only one reason why Goldman Sachs is suddenly interested in banking average Americans. *Quartz*. https://qz.com/670084/theres-one-reason-why-goldman-sachs-is-suddenly-so-interested-in-banking-regular-people/. Ross, S. (2015, Nov 11). Goldman Sachs vs Morgan Stanley business models (MS, GS). *Investopia*. http://www.investopedia.com/articles/markets/111115/goldman-sachs-vs-morgan-stanley-comparing-business-models.asp

[45] Pagell, M., & Wu, Z. (2017). Business implications of sustainability practices in supply chains. In Y. Bouchery, C.J. Corbett, J.C. Fransoo & T. Tan (eds) *Sustainable Supply Chains* (pp. 339-353). Springer International Publishing. See also *3M 2016 Sustainability Report* at http://multimedia.3m.com/mws/media/1214315O/2016-3m-sustainability-report.pdf

[46] Berz, K. (2015, May). *Transforming lives: The social return on Habitat's work in Canada*. Boston Consulting Group.

[47] Chow, C. W., Shields, M. D., & Chan, Y. K. (1991). The effects of management controls and national culture on manufacturing performance: An experimental investigation. *Accounting, Organizations and Society*, 16(3): 209-226. Newman, K. L., & Nollen, S. D. (1996). Culture and congruence: The fit between management practices and national culture. *Journal of International Business Studies*, 27(4): 753-779. Ringov, D., & Zollo, M. (2007). The impact of national culture on corporate social performance. *Corporate Governance: The International Journal of Business in Society*, 7(4): 476-485.

[48] For a description of four organizational models that arise from using Hofstede's data to develop clusters of national cultures, see Fitzgerald, S.P. (2002). *Organizational models*. Oxford UK: Capstone Publishing.

[49] Dyck, B., & Starke, F. (1999). The formation of breakaway organizations: Observations and a process model. *Administrative Science Quarterly,* 44 (4): 792-822.

Endnotes for Chapter 14

[1] The opening case was written drawing from: Rajala, R., Westerlund, M., & Lampikoski, T. (2016). Environmental sustainability in industrial manufacturing: Re-examining the greening of Interface's business model. *Journal of Cleaner Production*, 115: 52-61. Dean, C. (2007, May 22). Executive on a mission: Saving the planet. *New York Times*. Anderson, R.C. (1998). *Mid-course correction: Toward a sustainable enterprise: The interface model*. Atlanta, GA: Peregrinzilla Press. Anonymous, (2004). Nature and the Industrial Enterprise: Mid-Course Correction. *Engineering Enterprise* (Spring), pages 6-12. Hawken, P., Lovins, A. & Lovins, L.H. (1999). *Natural capitalism: Creating the next industrial revolution.* Boston, MA: Little, Brown and Company. Company website: http://www.interfaceinc.com.

[2] Lampikoski, T. (2012). Green, innovative, and profitable: A case study of managerial capabilities at Interface Inc. *Technology Innovation Management Review*, 2(11): 4. Stubbs, W., & Cocklin, C. (2008). An ecological modernist interpretation of sustainability: The case of Interface Inc. *Business Strategy and the Environment*, 17(8): 512-23.

[3] Rajala et al (2016).

[4] From Dean (2007).

[5] Rajala et al (2016: 56).

[6] Rajala et al (2016: 56).

[7] Branson, R. (2013). *Screw business as usual: Turning capitalism into a force for good*. New York, NY: Penguin.

[8] A new service Interface developed was to lease carpeting to industrial customers, so that Interface would take care of and replace carpet as needed. However, this leasing service failed because government regulations that limited customers' tax advantages.

[9] Anderson links this soft side to the need for spirituality in business. "The growing field of spirituality (a term that, frankly, turned me off when I first heard it, because I associated it with religiosity) in business is a cornerstone of the next industrial revolution" (Anderson, 1998).

[10] Stubbs, W., & Cocklin, C. (2008). An ecological modernist interpretation of sustainability: The case of Interface Inc. *Business Strategy and the Environment*, 17(8): 512-23.

[11] Stubbs & Cocklin (2008).

[12] Rajala et al (2016: 58).

[13] Van de Ven, A.H., & Poole, M.S. (1995). Explaining development and change in organizations. *Academy of Management Review*, 20(3): 510-540.

[14] Kavanagh, M.H., & Ashkanasy, N.M. (2006). The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger. *British Journal of Management,* 17: 81–103.

[15] Greiner, L.E. (1998). Evolution and revolution as organizations grow. *Harvard Business Review*, 76(3): 55-68. Haveman, H.A., Russo, M.V., & Meyer, A.D. (2001). Organizational environments in flux: The impact of regulatory punctuations on organizational domains, CEO succession, and performance. *Organization Science,* 12(3), 253-273.

[16] Research consistent with what has been called a "punctuated equilibrium" view, suggests that organizations are usually in period of equilibrium (incrementally fine-tuning and existing organization design type, which may last five or more years) but must occasionally experience a period of punctuation (a transformational change from one organization type to another). Organizations that fail to make qualitative changes to their organization design risk becoming Misfits and failing. For more studies in this area please see: Dyck, B. (1997). Understanding configuration and transformation through a multiple rationalities approach. *Journal of Management Studies*, 34: 793-823. Greenwood, R. & Hinings, C.R. (1993). Understanding strategic change: The contribution of types. *Academy of Management Journal*, 36:1052-1081.

Hinings, C.R., & Greenwood, R. (1988). *The dynamics of strategic change.* Basil Blackwell; Romanelli, E., & Tushman, M.L. (1994). Organizational transformation as punctuated equilibrium: An empirical test. *Academy of Management Journal*, 37(5): 1141-1163. Miller, D. (1992) *The icarus paradox*. New York, NY: HarperCollins Publishers.

[17] The "Misfit type" corresponds to what Miles and Snow (1978) called the "Reactor" organization, which referred to organizations that lack consistency among the elements of their organization design.

[18] Much has been written about organizational life cycle theory, but the classic article still is Greiner, L.E. (1972). Evolution and revolution as organizations grow. *Harvard Business Review*, 50: (July-August): 37-46.

While organizational life cycle theory is too prescriptive, it does have an underlying truth that continues to make it attractive to and helpful for practitioners and students. And there is research that provides support to the basic contention that managers change their organizations from one type to another over time. The research suggests that organizations may spend from five to 13 years in any one type (with some exceptions, like Lincoln Electric), but that as they outgrow it managers feel compelled to change (e.g., Dyck, 1997). For example, although life cycle theorists might argue that an organization that has grown out of the Simple type must enter the Defender type (no skipping of types is permitted), subsequent scholarship suggests that this is too rigid and we expect that managers will be able to choose to change into any one of the remaining types.

[19] Note that these general arguments are consistent with life cycle theory, but that the particular names we give to each type of organization differs from the names and builds on the description used by life cycle theorists (Greiner, 1972). Our discussion elaborates life cycle thinking by using terms and concepts related to organization design as presented in chapter 12. Of course, we fully recognize that our elaboration, as life cycle model in the first place, (over?) simplifies reality. It also builds on page 353 in Dyck, B., & Neubert, M. (2010). *Management: Current practices and new directions*. Boston MA: Cengage/Houghton Mifflin.

[20] Nadler, D.A., & Tushman, M.L. (1990). Beyond the charismatic leader: Leadership and organizational change. *California Management Review*, 32(2): 77-97.

[21] Dyck, B. (1996). The role of crises and opportunities in organizational change. *Non-profit and Voluntary Sector Quarterly,* 25: 321-346.

[22] Dyck, B. (1990). A dynamic model of organizational failure. In J.M. Geringer (Ed.), *Proceedings of Policy Division*, 11 (6): 35-44, Administrative Sciences Association of Canada, Whistler, British Columbia.

[23] Dyck, B., Mischke, G., Starke, F., & Mauws, M. (2005). Learning to build a car: An empirical investigation of organizational learning. *Journal of Management Studies,* 42 (2): 387-416.

[24] Although the four-step description provided here is based on Lewin's (1951) basic change model, it draws from and builds on a variety of studies, including the four-phase learning model developed by Mary Crossan et al (1999). Lewin, K. (1951). *Field theory in social science*. London: Tavistock. Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of Management Review*, *24*(3), 522-537.

[25] e.g., Dyck et al (2005).

[26] The TBL approach described here builds on a number of other models in the literature such as: Beer, M., Eisenstat, R., & Spector, B. (1990). Why change programs don't produce change. *Harvard Business Review*, 68 (6), 158-166.

[27] SET management modifies and builds on work the four-step friendly disentangling process used by Greenleaf (Nielsen, R.P. (1998). Quaker foundations for Greenleaf's Servant-Leadership and 'friendly disentangling' method. In L.C. Spears (ed.) *Insights on leadership,* 126-144. New York, NY: John Wiley & Sons.), the four-phase virtuous circle described in Dyck, B., & Wong, K. (2010). Corporate spiritual disciplines and the quest for organizational virtue. *Journal of Management, Spirituality and Religion*, 7(1):7-29, and ideas drawn from Weick, K. E., & Quinn, R. (1999). Organizational change and development. *Annual Review of Psychology*, 50: 361-386. Purser, R. & Petranker, J. (2005). Unfreezing the future: Exploring the dynamic of time in organizational change. *Journal of Applied Behavioral Science*, (41): 181-203.

[28] Although periods of equilibrium are thought of as relatively calm, in reality they have on-going tensions and forces for transformational change that are not pursued. For example, see Dyck, B. (1997). Understanding configuration and transformation through a multiple rationalities approach. *Journal of Management Studies,* 34 (5): 793-823.

[29] Dyck (1990).

[30] Staw, B.M., Sandelands, L.E., & Dutton, J.E. (1981). Threat rigidity effects in organizational behavior: A multilevel analysis. *Administrative Science Quarterly*, 26(1): 501-524.

[31] Dyck (1990).

[32] Sometimes TBL and SET managers might educate members at all organizational levels in how to read financial statements and how to link their own actions to the organization's health and well-being. An example of this approach is sometimes referred to as *Open Book Management*, which enables and invites all members of an organization to participate in identifying opportunities and needs to change. Jack Stack was an early pioneer in this approach to sharing information with employees. "It's amazing what you can come up with when you have no money, zero outside resources, and 119 people all depending on you for their jobs, their homes, even their prospects for dinner in the foreseeable future." Stack and a handful of managers purchased their small manufacturing company from International Harvester when they had been given the choice of either ownership or a shut down. The company was in a dire situation that could only be reversed with a radical approach that required employees to understand the business in a new way so that everyone could make decisions to keep the company afloat. With the combined wisdom of the whole company, they changed their company for the better. Open Book Management is an on-going approach to managing change. It holds as a core belief that significant change occurs when people at the bottom are meaningfully engaged and allowed to have a voice. Stack, J., & Burlingham, B. (1992). *The great game of business.* New York, NY: Doubleday.

[33] In addition, as was described earlier, SET management also differs from FBL and TBL approaches because SET management has a more dynamic or fluid understanding of configuration. Whereas FBL and TBL approaches focus on organization design as a relatively rigid fit between elements that need to be unfrozen in order to make changes, SET management places relatively more emphasis on how the organization design elements are in constant interaction with each other and with the external environment where change management requires "freezing" the elements in order to evaluate them.

[34] Dyck, B. (1997). Understanding configuration and transformation through a multiple rationalities approach. *Journal of Management Studies*, 34 (5): 793-823. Moreover, even they are implemented, they are often not successful: about 70% of mergers and acquisitions do not create shareholder value. Wiztmann, N., & Doerrenbaecher, C. (2016). The link between cultural due diligence and sociocultural post-merger integration: Management as a critical success factor in M&As. In Tarba, S.Y., Cooper, C.L., Sarala, R.M., & Ahammad, M.F. (Eds.) (2016). *Mergers and acquisitions in practice* (chapter 11). New York, NY: Routledge.

[35] McKendall, M. (1993). The tyranny of change: Organizational development revisited. *Journal of Business Ethics*, 12: 93-104.

[36] Dyck, B. (1996). The role of crises and opportunities in organizational change: A look at a nonprofit religious college. *Non-profit and Voluntary Sector Quarterly*, 25 (3): 321-346.

[37] This list, with the addition of praxis, was drawn from Yukl, G. (1998). *Leadership in organizations*. Upper Saddle River, NJ: Prentice Hall.

[38] Rousseau, D.M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreement*. Thousand Oaks, CA: Sage Publications.

[39] For example, Beer, Eisenstat & Spector (1990).

[40] Peters, T.J., Waterman, R.H. (1982). *In search of excellence: Lessons from America's best-run companies*. New York, NY: Warner Book.

[41] Tannenbaum, A.S. (1962). Control in organizations: Individual adjustment and organizational performance. *Administrative Science Quarterly*, 236-257.

[42] Nielsen (1998).

[43] See review in Walker, K.., Dyck, B., Zhang, J. & Starke, F. (2017, forthcoming). The use of praxis in the classroom to evoke student transformation. *Journal of Business Ethics*.

[44] See review in Walker et al (2017)

[45] Page 397 in Dyck, B., & Neubert, M. (2010)

[46] Drawn from research that formed the basis of Longenecker, C. O., Neubert, M. J., & Fink, L. S. (2007). Causes and consequences of managerial failure in rapidly changing organizations. *Business Horizons*, *50*(2): 145-155.

[47] Neubert, M.J., & Cady, S.H. (2001). Program commitment: A multi-study longitudinal field investigation of its impact and antecedents. *Personnel Psychology*, 54: 421-448. Herscovitch, L. & Meyer, J.P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology*, 87(3): 474-487. Robertson, P.J., Roberts, D.R., & Porras, J.I. (1993). Dynamics of planned organizational change assessing empirical support for a theoretical model. *Academy of Management Journal*, 36: 619-634.

[48] On occasions where changes do not achieve the desired results, 70% of members will attribute it to a manager having the wrong skill set or lacking the best person-job fit for the job. Reichers, A.E., Wanous, J. P., & Austin, J.T. (1997). Understanding and managing cynicism about organizational change. *Academy of Management Executive*, 11(1): 48-59. Kotter, J. (1996). *Leading change*. Boston, MA: Harvard University Press.

[49] Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall. Gist, M. (1989). The influence of training method on self-efficacy and idea generation among managers. *Personnel Psychology*, 42: 787-805.

[50] Kotter (1996).

[51] Neubert & Cady (2001).

[52] Fox, S. & Amichai-Hamburger, Y. (2001). The power of emotional appeals in promoting organizational change. *Academy of Management Executive*, 15: 84-94.

[53] Judge, T.A., Thoresen, C.J., Pucik, V., & Welbourne, T.M., (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, 84(1): 107-122.

[54] Beer, Eisenstat & Spector (1990).

[55] Hurley, R.F. (2006). The decision to trust. *Harvard Business Review*, 84(9): 55-62.

[56] Hurley (2006).

[57] Salas, E., Rozell, D., Mullen, B., & Driskell, J.E. (1999). The effect of team building on performance. *Small Group Research*, 30(3): 309-329.

[58] Balogun, J. (2005). Managing change: Steering a course of between intended strategies and unanticipated outcomes. *Long Range Planning*, 39(1): 29-49.

[59] Kotter, J. (1996), and Kotter, J. (2005). *The heart of change*. Boston, MA: Harvard University Press.

[60] Beer, Eisenstat & Spector (1990).

Endnotes for Chapter 19

[1] This case is based on the lead authors' observations and research. Some of the details have been altered, and it is offered for pedagogical purposes only. Starke, F. A., Sharma, G., Mauws, M.K., Dyck, B. & Dass, P.

(2011). Exploring archetypal change: The importance of leadership and its substitutes. *Journal of Organizational Change Management*, 24 (1): 29-50. Dyck, B., Starke, F., Mischke, G. & Mauws, M. (2008). Designing and producing a three-wheeled car: An exploratory examination of intra-organizational knowledge flows. *Journal of Small Business & Entrepreneurship*, 21(1): 37-58. Mischke, G.A., Mauws, M.K., Starke, F. & Dyck, B. (2001). Westward Industries Ltd. *Case Research Journal*, 21(1): 15-42.

[2] Michael also developed a profit-sharing plan, where some of the profits were to be spent in ways that benefited everyone in the firm as a group (e.g., a staff benefits program) and another portion to benefit the outside community (e.g., a play structure for a nearby playground).

[3] For example, imagine that you manage an organization that builds medical devices. Your control system needs to ensure that the devices meet technical, operational, and safety performance standards. This requires establishing performance standards to ensure that: suppliers follow stringent quality control; all raw materials are traceable and a recall system in place to identify which products need to be removed from the market in case of problem; chemicals used in your device are stored safely and with proper documentation; adequate measures are in place for cleaning the equipment; staff have proper training in safety standards; pest control is in place; packaging materials are not contaminated; shipping occurs under proper environmental conditions, including temperature and humidity; and so on. This example is taken from Rooney, J.J. (2001). 7 steps to improved safety for medical devices. *Quality Progress*, 34(9): 33-41.

[4] Manos, T. (2006). Value stream mapping: An introduction. *Quality Progress*, 39(6): 64-69.

[5] Bhasin, S., & Burcher, P. (2006). Lean viewed as a philosophy. *Journal of Manufacturing Technology Management,* 17: 56-72.

[6] For example, managers in the beef industry spend about $350 million a year to ensure that meat sold to the public does not contain harmful pathogens. Companies like Tyson Fresh Meats use elaborate technology to test hundreds of meat samples in a day, and have added huge chambers to its slaughterhouses where carcasses are scalded and washed in acid, and where steam vacuums suck away microbes. Martin, A. (2007, Dec 6). Meat processors look for ways to keep ground beef safe. *The New York Times.* http://www.nytimes.com/2007/12/06/business/06meat.html

[7] For example, managers in an automobile manufacturer may specify exactly what sort of steering wheel they want from suppliers, and then open the process up for bidding. Managers in a Human Resources department may specify the type of educational training and experience required for each job, and recruit accordingly. Department managers are given financial goals and target ratios.

A well-known example of FBL control standards comes courtesy of Jack Welch during his tenure as CEO of General Electric, where he established the policy that workers in the lowest-performing ten percent of the workforce would lose their jobs. Welch is also credited with popularizing control systems based on "Six Sigma" performance standards. Six Sigma standards require managers to work towards developing processes that allow outputs to be defect-free 99.9997 percent of the time. Welch attributed billions of dollars in GE savings to the efficiency and productivity gains associated with the Six Sigma approach.

The Six Sigma quality standard can be applied to each point in the value chain: inputs, transformation, and output. For example, managers use statistical quality control techniques to test the quality of incoming components, for "in-process sampling" and for final output "acceptance sampling." Over time the Six Sigma approach has been broadened to include the idea of "disciplined and relentless pursuit of higher quality and lower costs." Taken from page 669 in Daft, R.L. (2003). *Management (6th edition).* Mason, OH: Thomson South-Western.

There are a number of similar techniques, not just Six Sigma, that relentlessly pursue continuous improvement and cost reduction (e.g., lean production, Kaizen techniques, statistical process control). As is explained more fully later in the chapter in the discussion on Deming, these approaches are also associated with a control systems that focuses less on the performance of individual employees and more on how to improve organization-wide systems.

The Six Sigma approach can be implemented in a wide variety of settings, from industry giants like General Electric to agribusinesses like dairy farms, where tools have been applied to help managers draw flow charts to maintain milk productivity while minimizing financial costs and ecological pollution. Tylutki, T.P. & Fox, D.G. (2002). Mooooving Toward Six Sigma. *Quality Progress,* February, 35 (2): 34-41.

[8] For an interesting history of how and why things unfolded this way within management theory and practice, see Sheer, S.A. (2005). From supply-chain management to value network advocacy: Implications of e-supply chains. *Supply Chain Management*, 10(2): 77-83.

[9] For more on Interface, see opening case chapter 14, and see Anderson, R. C. (1998). *Mid-course correction: Toward a sustainable enterprise: The Interface model*. Atlanta, GA: Peregrinzilla Press.

[10] Kaplan, R. & Norton, D. (1996). *The balanced scorecard.* Harvard Business School Press: Boston, MA; Kaplan, R. & Norton, D. (2006). How to implement a new strategy without disrupting your organization. *Harvard Business Review*, March, 84(3): 100. Using a balanced scorecard may create a host of positive feedback loops, including having a positive effect on profits. For example, when IBM and Nokia invest substantial resources in community educational initiatives, this may also enhance corporate reputation and aid in recruiting employees or developing future employees. When Dupont reduces energy consumption and McDonald's alters its food packaging to reduce waste, these decisions score well in community and environmental assessments as well as paying off in reduced costs. In any case, from a TBL perspective, these positive feedback loops on profitability are no more important than their positive effect serving a broad range of stakeholders. For several pages of sustainability audit measures, see Epstein, M.J., & Buhovac, A.K. (2014). *Making sustainability work (2nd ed).* Sheffield: Greenleaf.

[11] A number of these measures can be found on-line at http://www.redefiningprogress.org/. See http://www.rprogress.org/sustainability_indicators/genuine_progress_indicator.htm.

[12] Semler describes Welch's practice of firing the lowest-performing ten percent of the workforce as "microterrorism." See page 35 in Vogl, A.J. (2004). The Anti-CEO. *Across the Board*, May/June: 30-36.

[13] Vogl (2004).

[14] Lloyd, B. (1994). Maverick! An alternative approach to leadership, company organization and management. *Leadership & Organization Development Journal*, 15(2): 8-12.

[15] Page 98 in Semler, R. (2004). *The seven-day weekend.* New York, NY: Portfolio/Penguin Group.

[16] Pages 98 and 234 in Semler, R. (2004). *The seven-day weekend*. New York, NY: Portfolio/Penguin Group;

[17] Greenwald, C. (2004). WITSA study: World IT spending rebounds thanks largely to developing world. Arlington, VA: *World Information Technology and Services Alliance*.

[18] Big data has been defined as "extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behaviour and interactions." *Oxford Living Dictionary*. https://en.oxforddictionaries.com

[19] Page 594 in Jones, G. R., & George, J.M. (2003). *Contemporary management (3rd edition).* Boston, MA: McGraw-Hill Irwin.

[20] See Daft (2003: 726 and 730).

[21] Unnamed author(s) (2017). The latest on workplace monitoring and surveillance. *American Management Association*. http://www.amanet.org/training/articles/the-latest-on-workplace-monitoring-and-surveillance.aspx

[22] For example, managers at Cisco installed an eHub systems after they had to write-off $2.2 billion worth of computer components that had been ordered due to inflated consumer demand information provided by salespeople. Had there been a well-functioning eHub in place, all the stakeholders would have recognized that the salespeoples' demand figures were inflated due to the fact that many customers were placing multiple orders at different companies, and intending to make their purchase at the first company that could supply what they were purchasing.

[23] Even weak monitoring systems undermine interpersonal respect. Note also that introducing sanctions tends to make members see decision more in terms of business rather than ethical terms. Tenbrunsel, A.E.

& Messick, D.M. (1999). Sanctioning systems, decision frames, and cooperation. *Administrative Science Quarterly*, 44(4): 684-707.

[24] Other numerical measures are also available. For example, observations that only 3 of its 3000 members left Semco on their own over a two-year period, and that 1400 engineers applied for a job advertisement, suggest that Semco is seen as a good place to work.

[25] Note the emphasis is on systems, not on motivating individuals per se

[26] Gartner, W.B., & Naughton, M.J. (2000). Out of crisis. In Pierce, J.L. & Newstrom, J.W. (eds.) *The Manager's Bookshelf* (pp. 53-58). Upper Saddle River, NJ: Prentice Hall. The description of The Red Bead Game and the Mazda/Ford case is drawn from this article.

[27] Deming originally had greater influence in Japan than in Western countries, perhaps because Western countries place a higher emphasis on individualism (the Japanese initially thought Deming was showing them how it was already being done in America). Many organizations have enjoyed improved performance when implementing the sorts of control systems consistent with Deming's principles. For example, Ford Motor Company found that transmissions manufactured according to these principles resulted in warranty repairs decreasing tenfold, and that "things gone wrong" customer reports dropped by 50 percent over a period of five years. Other research claimed a four-fold increase in productivity when systems like TQM are introduced. For other examples, see Bhashin, S. & Burcher. P. (2006). Lean viewed as a philosophy. *Journal of Manufacturing Technology Management*, 17 (1): 56-72.

[28] Pettigrew, A. M. (1985). *The awakening giant: Continuity and change in ICI*. Oxford: Basil Blackwell.

[29] Bhashin & Burcher, 2006. Deming suggests that the process of transforming an entire organization to his approach can take a minimum of ten years (Gartner, W.B. & Naughton, M.J., 2000).

[30] O'Boyle, T.F. (1998). *At any cost: Jack Welch, General Electric, and the pursuit of profit*. New York, NY: Alfred A. Knopf.

[31] Nielsen, R. P. (1998). Quaker foundations for Greenleaf's servant-leadership and "friendly disentangling" method. In L. C. Spears (ed.), *Insights on leadership* (pp 126–144). New York, NY: John Wiley & Sons.

[32] For example, the suppliers and key customers of Malden Mills were very gracious in allowing delays and extending credit when the firm burned down, thanks in large part to SET management at Malden Mills where employees received pay even though they could not work during the time when the factory was burned (see opening case chapter 5).

[33] Of course, there are times when SET managers must make decisions and take action. However, this is not the default mode – the SET default is the much more challenging and rewarding mode of trusting the instincts of others. From a FBL perspective this may seem like managers are avoiding responsibility, while from a SET perspective it is part of treating others with dignity and respect. This respect is evident and built-into each one of the four parts of the SET control process.

[34] Semler (2004: 122).

[35] Ever since the time of the Roman empire, management theory has looked at these three basic domains or relationships that need to be managed. For more on the three main domains of management through history, see *oikononmia*, *chrematistics* and patron-client relations in Dyck, B. (2013a). *Management and the gospel: Luke's radical message for the first and twenty-first centuries.* New York, NY: Palgrave-Macmillan.

[36] Some of the description of these business functions is drawn from http://umanitoba.ca/faculties/management/academic_depts_centres/majors/index.html

[37] Unnamed Author (2006) Training Best Practices. *Training*, 43(3): 60-63. Previously found at http://www.astd.org/. Supporting a person who is completing a General Education Degree may or may not have instrumental value in the workplace, but it also enhances the dignity of the person who earns it.

[38] For example, at Reell Precision Manufacturing, executive pay is limited to roughly seven to ten times that of the lowest-paid employee: see page 21 in Benefiel, M. (2005). *Soul at work.* New York, NY: Seabury Books.

[39] "these axioms are as much statements of common sense as they are theoretical statements." Taken from pages 11-23 in Keown, A., Petty, W., Scott, D., Martin, J. (1998). *Foundations of finance: The logic and practice of financial management (2nd ed).* Englewood Cliffs, NJ: Prentice Hall, Inc. Parts of this table also appear in page 158 in Dyck, B. (2013b). A proven way to incorporate Catholic Social Thought in business school curriculae: Teaching two approaches to management in the classroom. *Journal of Catholic Higher Education*, 32(1): 145-163, and in Dyck (2013a).

[40] Antagonism and dysfunctional status differentials would be created of one neighbor were to start to make exceptional profits due to having a virtual "monopoly" (which is what having a unique product or service that others couldn't imitate used to be called long before it was dubbed "competitive advantage").

[41] This table, and the discussion of the four assumptions of accounting, draws heavily from Dyck (2013a: 175; 2013b: 157), which in turn draws from and build on Christie, N., Dyck, B., Morrill, J. & Stewart, R. (2013). CSR and accounting: Drawing on Weber and Aristotle to rethink Generally Accepted Accounting Principles. *Business and Society Review*, 118 (3): 383-411.

[42] Larson, P.D., & Halldorsson, A. (2004). Logistics versus Supply Chain Management: An international survey. *International Journal of Logistics: Research and Applications*, 7 (1): 17-31.

[43] Adapted from Dyck (2013a).

[44] It includes methods of: (a) break-even analysis (determine the sales volume and prices required to earn a profit, decide which product lines to keep and which to drop, set prices for products and services); (b) forecasting (projections that help to plan for production targets, whether and when to expand production facilities); (c) inventory modeling (help managers decide on the timing and quantity for ordering supplies to maintain an optimal inventory, how much end-product inventory to keep on hand); (d) linear programming (how to allocate scarce resources among competing uses) and; (e) simulations (mathematical models that permit testing the outcomes associated with making different decisions).

[45] Recall that cradle-to-cradle thinking contrast with traditional "cradle-to-grave" view, where the end of the product's life is considered to be when it is buried in a landfill.

[46] Definition of Marketing. *American Marketing Association*. See company website (Accessed 2016, May): at https://www.ama.org/AboutAMA/Pages/Definition-of-Marketing.aspx.

[47] The four Ps were developed by *McCarthy, J.E. (1964). Basic marketing: A managerial approach. Homewood, IL: Irwin.* Kotler, P.T., & Keller, K.L. (2012: 5) add that the "right" four Ps create a fifth P, profits, and that "one of the shortest good definitions of marketing is meeting needs profitably." Kotler, P.T., & Keller, K.L. (2012), *Marketing management (14th edition).* New Jersey: Pearson.

[48] This table draws heavily from Dyck, B., & Manchanda, R. (2017). Sustainable Marketing 2.0: A Virtue Theory Based Approach. *Working paper*, University of Manitoba. See also Dyck (2103a, 2013b). See also Kotler, P., Kartajay, H., & Setiawan, I. (2010). *Marketing 3.0: From products to customers to the human spirit.* John Wiley & Sons.

[49] For examples, see Lu, J.W. (2002). Intra-and inter-organizational imitative behavior: Institutional influences on Japanese firms' entry mode choice. *Journal of International Business Studies*, 33(1), 19-37. See also Nelson, T. (2003). The persistence of founder influence: Management, ownership, and performance effects at initial public offering. *Strategic Management Journal*, 24(8): 707-724.

[50] Sydow, J., Schreyögg, G., & Koch, J. (2009). Organizational path dependence: Opening the black box. *Academy of Management Review*, 34(4): 689-709.

[51] Marquis, C., & Tilcsik, A. (2013). Imprinting: Toward a multilevel theory. *Academy of Management Annals*, 7(1): 195-245. These effects can also influence subsequent intrapreneurial behavior in organizations: Dyck, B. (1997). Exploring organizational family trees: A multi-generational approach for studying organizational births. *Journal of Management Inquiry*, 6 (3): 223-233.

[52] Boeker, W. (1989). Strategic change: The effects of founding and history. *Academy of Management Journal*, 32(3): 489-515.

[53] Nelson, T. (2003). The persistence of founder influence: Management, ownership, and performance effects at initial public offering. *Strategic Management Journal*, 24(8): 707-724.

[54] For example, Blank & Dorf define a start-up as a temporary organization searching for a scalable business model. Blank, S., & Dorf, B. (2012). *The startup owner's manual: The step-by-step guide for building a great company.* Pescadero, CA: K&S Ranch Consulting. Spinelli, S., & Adams, R. (2011). *New venture creation: Entrepreneurship for the 21st century* (9th edition). New York, NY: McGraw-Hill Education.