# **Chapter One**

#### **Introduction to Entrepreneurship**

### **Chapter Overview**

- Introduction to Entrepreneurship
- What is Entrepreneur, Entrepreneurship

- The role of Innovation and Entrepreneurship
- The Commercialization Process

### The Transition to Entrepreneurship

#### What translates

- Engineers conceive, design, build, and operate useful objects or processes
- Engineering education is a logical foundation for entrepreneurial

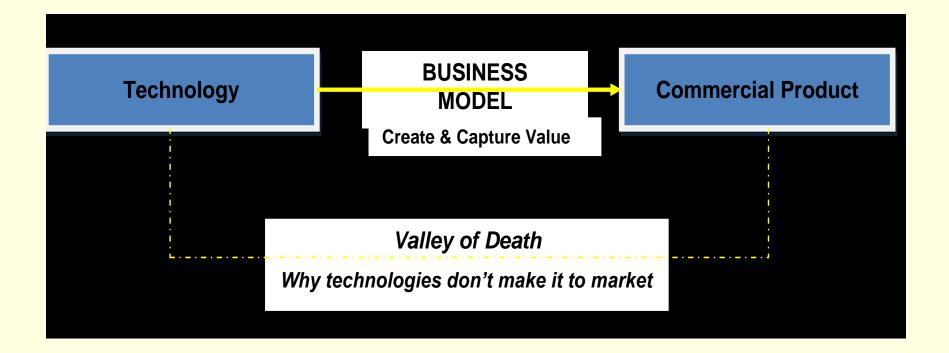
concepts



What does not easily translate

- Linear thinking
- Formulas
- Solutions in search of a problem
- Understanding the way entrepreneurs think

### From Bench to Market



#### Entrepreneur

### Entrepreneurship



### What Is an Entrepreneur?

- Who is an entrepreneur?
- What is entrepreneurship?
- These questions are asked more and more frequently, reflecting the increased national and international interest in the field
- Yet, in spite of all this interest, a concise, universally accepted definition has not yet emerged.

 What Is an Entrepreneur?
The term entrepreneur comes from the French and literally translated word means

"between-taker" or

■ "go-between."

In the Middle Ages, the term entrepreneur was used to describe a person managing large production projects

In the case of a large production project, the person would not take any risks but would merely manage the project using the resources provided

### What Is an Entrepreneur?

One who creates a new business in the face of risk and uncertainty for the purpose of achieving profit and growth by identifying opportunities and assembling the necessary resources to capitalize on them.







### Development of Entrepreneurship Theory and the Term Entrepreneur

Earliest Period: a passive risk taker.

Middle Ages: actor and person in charge of large scale production projects.

- 17<sup>th</sup> century: person bearing risks of profit (loss) in a fixed price contract with Government.
- 1725: Richard Cantillon person bearing risks is different from one supplying capital.
- **1803**: Jean Baptise Say separated profits of entrepreneur from profits of capital.
- 1876: Francis Walker distinguished between those who supplied funds and received interest and those who received profits from managerial capabilities.
- 1934: Joseph Schumpeter entrepreneur is an innovator and develops untried technology.
- **1961**: David McClellend entrepreneur is an energetic, moderate risk taker.

**1964**: Peter Drucker – entrepreneur maximizes opportunities.

#### What Is an Entrepreneur?

"The function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, opening a new source of supply of materials or a new outlet for products, by reorganizing a new industry . . . ."

Joseph Schumpter

### Definition of Entrepreneurship

"Entrepreneurship is the dynamic process of creating incremental wealth. The wealth is created by individuals who assume the major risks in terms of equity, time, and/or career commitment or providing value for some product or service. The production service may or may not be new or unique but value must somehow be infused by the entrepreneur by receiving and allocating the necessary skills and resources." Robert C. Ronstad

### Why Study Entrepreneurship?

- Scientists and engineers who want to lead companies need to know how to back up ideas with numbers
- You will learn the complex business processes involved in commercialization
- You will learn how to make trade-offs among features, benefits, risks, price, markets, and operations
- You learn how to adapt to uncertainty and change
- You learn techniques for managing people

### Importance of Entrepreneurship

- Employment Creation
- Local Resources utilization
- Decentralization and Diversification of business.
- Promotion of technology
- Capital Formation
- Promotion of entrepreneurial culture

#### **Discussion Time**

# Innovation Entrepreneurship



### What is Innovation?

- Producing something new
- Commercializing or <u>extracting value from</u> ideas
- Schumpeter's five types of innovation
  - New product or substantial change in existing product
  - New process
  - New market
  - New sources of supply
  - Changes in industrial organization
- Incremental innovation = improvements on existing products
- Disruptive innovation = game changers

#### Incremental innovation



Disruptive innovation

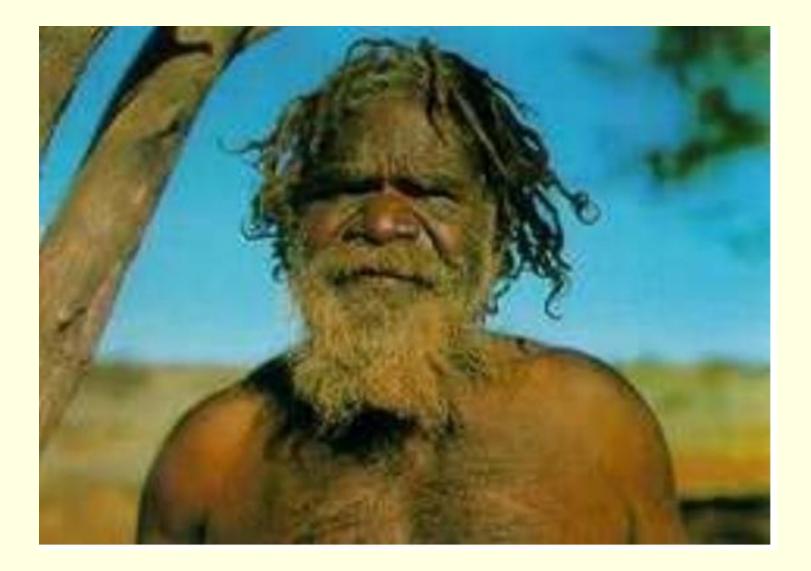
AI, Robotics, 3D printing



### Is this an Innovation?



### For Him it is an Innovation...



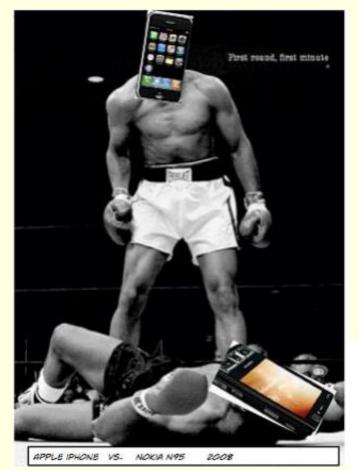
### Do you like this Innovation?



### He does not like Digital Cameras!



#### Innovation Changes the world....



#### Good bye, Nokia



The Role of Innovation and Entrepreneurship

- Technological change and entrepreneurship are critical components of growth models based on market incentives.
- The new economy is characterized by:
  - Knowledge workers
  - Globalization
  - Innovation
- Time-to-market is a key competitive advantage

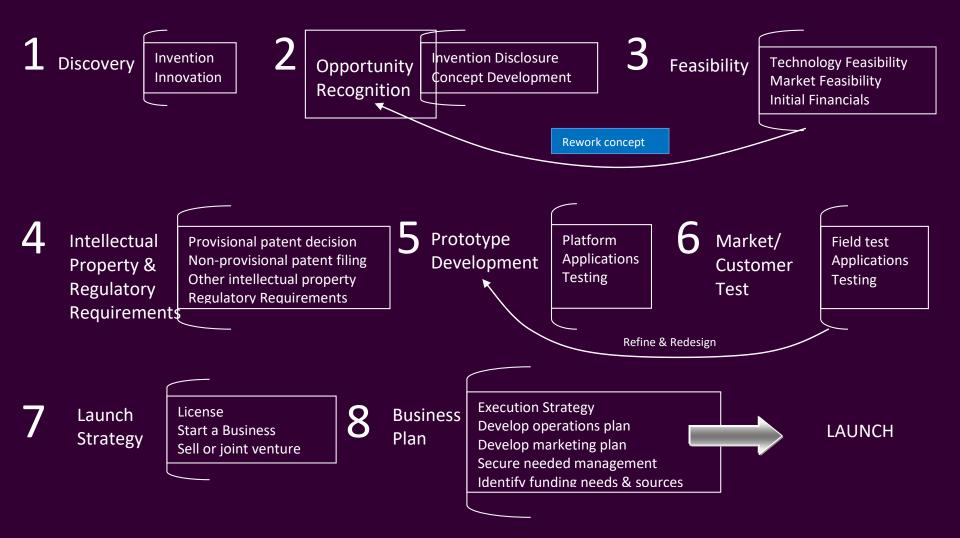


### **Dispelling Innovation Myths**

- The myth of the great idea
- The myth of doing what's expected
- The myth of the solo inventor
- The myth of the first mover



#### The Commercialization Process



### The Foundations of Entrepreneurship











### The World of the Entrepreneur

- GEM (Global Entrepreneurship Monitor) study
  - Globally 9.4 percent of adults are actively engaged in trying to start a business.
  - Men are twice as likely as women to start a business.
  - Nearly one-third of global entrepreneurs are between the ages of 25 and 44.



WHAT WOULD YOU ATTEMPT TO DO IF YOU KNEW YOU (OULD NOT FAIL?

#### What's holding you back?

### **Characteristics of Entrepreneurs**

- Desire for responsibility
- Preference for moderate risk
- Confidence in their ability to succeed
- Desire for immediate feedback
- High level of energy
- Future orientation serial entrepreneurs
- Skilled at organizing
- Value achievement over money

One characteristic of entrepreneurs stands out:

Diversity!

Anyone – regardless of age, race, gender, color, national origin, or any other characteristic – can become an entrepreneur (although not everyone should).

#### **Discussion Time**

#### Entrepreneurs

#### Inventors



### Entrepreneurs Vs Inventors

- An inventor, an individual who creates something for the first time, is a highly driven individual motivated by his or her own work and personal ideas
- Entrepreneur falls in love with the organization (the new venture) and will do anything
- An inventor falls in love with the inven and will not try modify the invention make it more commercially feasible.

### Benefits of Entrepreneurship

- The opportunity to:
- Create your own destiny
- Make a difference
- Reach your full potential
- Reap impressive profits
- Contribute to society and to be recognized for your efforts
- Do what you enjoy and to have fun at doing it





### **Drawbacks of Entrepreneurship**

- Uncertainty of income
- Risk of losing your entire investment
- Long hours and hard work
- Lower quality of life until the business gets established
- High levels of stress
- Complete responsibility
- Discouragement



### The Diversity of Entrepreneurship

- Young entrepreneurs
- Women entrepreneurs
- Minority-owned enterprises
- Immigrant entrepreneurs
- Part-time entrepreneurs



### The Diversity .... Cont'd

Home-based businesses

Family businesses

Corporate castoffs

Corporate dropouts



### Forms of Entrepreneurship

- The Individual Entrepreneur: An individual who started, acquired, or franchised his or her own independent organization
- Intrapreneur:- who does entrepreneurial work within large organizations.
- The Entrepreneurial Organization:- An organization can create an environment in which all of its members can contribute in some fashion to the entrepreneurial function

# Small Businesses...



- Employ 51 percent of the nation's private sector workforce.
- Create more jobs than big businesses.
- Leaders offering training and advancement opportunities to workers.
- SME's in Ethiopia are given much priority than ever.

### Small Businesses...



Account for 47 percent of business sales.

Create 13X more innovations per employee than large companies. Ten Deadly Mistakes of Entrepreneurship

- 1. Management mistakes
- 2. Lack of experience
- 3. Poor financial control
- 4. Weak marketing efforts
- 5. Failure to develop a strategic plan

### Ten Deadly Mistakes ,.... Cont'd

- 6. Uncontrolled growth
- 7. Poor location
- 8. Improper inventory control
- 9. Incorrect pricing
- 10. Inability to make the "entrepreneurial transition"

### Putting Failure into Perspective

- Entrepreneurs are *not* paralyzed by the prospect of failure.
- Failure a natural part of the creative process.
- Successful entrepreneurs learn to fail intelligently.

Avoiding the Pitfalls of **Small Business Failure** Know your business in depth Develop a solid business plan Manage financial resources Understand financial statements Learn to manage people effectively Keep in tune with yourself

