Jairo H. Cifuentes-Madrid Pablo Landoni Couture Xavier Llinàs-Audet *Editors* 

Strategic Management of Universities in the Ibero-America Region



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# Strategic Management of Universities in the Ibero-America Region

A Comparative Perspective



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# Contents

1	Strategic Management in Universities: A Conceptual Framework Based on Ibero-American Higher Education Systems Claudia Lucia Velandia Gomez and Michele Girotto	1
2	<b>Trends in Latin American Higher Education Systems</b> Luis Eduardo González, Oscar Espinoza, and Jasmina Berbegal Mirabent	45
3	<b>Trends and Dynamics of Strategic University Management</b> <b>in Ibero-American Higher Education</b> Michele Girotto, Xavier Llinàs-Audet, and Luis Alejandro Chiaramonte Cipolla	69
4	Best Practice in University Strategic Management's Conceptual Framework Jairo H. Cifuentes-Madrid, Pablo Arranz-Vals, and Joaquim Deulofeu	129

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## Introduction

The economic and social changes occurring at both the global and local levels call on higher education institutions (HEIs) for new and creative responses.

A variety of actors, such as national and regional governments, businesses and civil society organisations, identify HEIs as an essential part of the solution to the economic and social challenges facing countries. Indeed, the constructive criticisms of society as well as the generation of wealth and competitiveness are strongly related to the processes of knowledge creation, dissemination, and transfer. Developing an effective relationship between HEIs and the various actors in the environment has become a priority for the management of those institutions. HEIs' core functions and services in terms of teaching—learning, research, and extension— must be performed and rendered with increasingly exacting quality and suitability criteria.

The agenda of HEIs includes such concerns as: their proper governance, demands for transparency and accountability, the need to promote new pedagogical and scientific capabilities for lecturers and researchers, improving quality and the permanent updating of academic programs; the generation of knowledge that stretches the borders shared up to now by different scientific communities; the imperative optimisation and proper management of resources; the problems of institutional financing and consequent effects on university autonomy, as well as claims for the suitability and relevance of programs and academic curricula. Without a doubt, these are all overwhelming demands for university administrators.

Framed by these concerns, this book advances on relevant current policy debates as the analysis of the complex relationships between governance, decision-making systems, and university autonomy. Sustainable university management with clear definitions on its social responsibilities nurtures the educational system and society. Therefore, the examination of the concept of university autonomy in the institutional frameworks of universities takes into account the widespread concern of all stakeholders in the education sector for a more in-depth discussion on the role of universities in society. Accordingly, the interlinks of strategy, budgeting, and funding sources is an important concern for higher education development. The idea of making optimum and efficient use of societal resources and organisational capabilities is at the core of all strategic planning processes. Taking into consideration these previous premises, discussions are introduced on how to achieve the goal of attracting new forms of funding, while taking into account that the current economic environment poses considerable constraints.

To respond to these and other concerns, HEI leaders have turned to strategic university management, which they find to be an extremely important and powerful management tool that allows them to effectively meet today's needs and align resources and organisational capabilities with the challenges of the social, economic, and cultural environment.

The strength of this book relies in great part on its practical framing. The editors of the book belong to the Telescopi Network of universities, which was created in 2008 under the coordination of the UNESCO Chair of Higher Education Management at the Universitat Politècnica de Catalunya (UPC), Spain, with the agreement to establish a permanent international network of observatories on strategic university management in Europe and Latin America that would make it possible to select, promote, and disseminate best practices in the field, in order to increase the quality and suitability of higher education, and contribute to the creation of a space to facilitate interuniversity cooperation between Europe and Latin America.

Accordingly, the point of departure was a widespread concern about how societies can guarantee the quality of higher education, while at the same time ensuring equal access for all sectors of society, and the realisation that in the involved countries, there have been major reforms in higher education policies aimed at improving the quality of systems and accountability to society.

As follows, the establishment of the Network emerged as an initiative for monitoring and providing information on the duties of universities in the field of strategic administration and management. Consideration was also given to the social value of reinforcing the governance of HEIs, their transparency, accountability, and the democratisation of available information on the use of resources involving proposed and obtained results.

After more than 5 years of intensive work within the Telescopi Network, practical and theoretical concepts were gathered, analysed, and discussed, which provided a rich set of contextual and empirical data that was then edited and structured to form the overall framework of this book. Correspondingly, the book is arranged into four chapters that address conceptual and empirical analysis of the main trends associated with the strategic management of universities in the Ibero-America region, from a comparative perspective.

1. Strategic Management in Universities. A Conceptual Framework Based on Ibero-American Higher Education Systems.

The first chapter identifies and explains the trends and dynamics of strategic university management through the compilation of a set of concepts found to be recurrent in the context of the strategic management of HEIs in the different countries. These concepts were used to form a synthesis of the way HEIs have been addressing the issue so far. To build this conceptual framework, consideration was given to the contributions brought both by experience and by the continuous work involving reflection and theoretical analysis on strategic management literature. Therefore, based on the essential approach to institutional governance and decision-making systems, the conceptual framework revolves around the guiding principle that strategic planning is an active process consisting of three components: thinking, which refers to the formulation and design of the strategy; doing, involving the implementation, communication, and alignment of the strategy; and learning, which consists of assessment and review.

The chapter highlights the importance of information in strategic management processes, since credibility of university governance is earned by making decisions objectively and with total transparency for the community. Reporting and communication are crucial elements to ensure accountability and transparency of the process. Controversy on the professionalisation of management is examined as well as the importance of leadership skills and competencies of university authorities. A successful implementation of strategies is associated with the achievement of increased participation throughout the planning process, as well as a shared vision of the defined strategy. With that in mind, suggestions to achieve an efficient combination of leadership and managerial competencies constitute a differentiating factor in the process of aligning corporate and functional strategy.

The reader will also observe the different relationships and linkages between the various concepts examined. The presentation itself does not reveal the existence of a new and unique method to strategic university management, though it does lay the foundations for a dialogue revolving around a common language, and some recurrent themes for those who participate in university management and administration. It is the development of a conceptual space on which work and discussion can begin; this will allow an in-depth conversation about the suitability, efficiency, quality, and success of the current programs for institutional management and their relationship with the environment, public policy, students, internal units, and other stakeholders. In other words, based on reflection and analysis, this conceptual framework is conceived as a coordinated, consistent proposal to serve as the foundation for developing a sound model of strategic management for HEIs.

#### 2. Trends in the Latin American Higher Education Systems

The institutions involved in the analysis are aware of the importance of the diverse and very rich national contexts and circumstances in strategic university management. As such, they have also advanced in the identification of the key trends and characteristics of the higher education systems in Latin American countries, the majority group of countries in which it operates and where we can observe considerable voids when it comes to quality information. With that, they expressed their belief that the strategic university management—and its objective of strengthening the governance and decision making of HEIs—requires knowledge of the circumstances and peculiarities of the higher education systems where they operate.

In this chapter, with an analytical review of regional systems of higher education, some elements have been identified in recent decades that are common to different countries, at both the system and institutional levels. As such, mention is made of the increased enrollment and coverage rate, closely related to population growth; privatisation and its scope; inequities in access, retention and employability; and changes in the financing system and the role of the state. Special emphasis is made in the changing profile of faculty members. On one hand, its number has increased significantly. But this has been made at the price of many faculty members being hired part-time, which is perceived as a threat for their commitment towards their institutions and as a decrease in research activities. A significant number of faculty members either perform an independent professional job or work for more than one academic institution at the same time, which clearly restricts their activity to straight teaching. A majority of universities in the Ibero-American region prefer a collegial model of governance, raising the relevant concern on legitimisation of strategic planning processes. Leaders must recognise the importance of increased participation of the university community in general, and the relevance for consensus-based, transparent, decisions.

# 3. Trends and Dynamics of Strategic University Management in Ibero-American Higher Education

The third chapter starts by providing background information on the historical concerns, criteria and contributions of previous empirical studies about strategising in universities. The development of the chapter involves the identification of some contextual and institutional characteristics and dynamics that influence the strategic university management. Then, the focus switches to the case of Latin American and European countries, which emphasises the fact that when it comes to strategic university management, those countries are not starting from scratch. With approaches that are traditional, but also in some cases novel, with varying degrees of appropriation and complexity, with very important strengths and, obviously, with limitations, the more than 400 HEIs studied across different countries made it possible for a characterisation to be identified in regard to strategic university management systems and a relevant comparative analysis to be conducted.

This chapter is quite extensive in methodology issues, such as design of the study, characterisation of variables, sampling strategy and data analysis. Special emphasis is made on the cyclic nature of strategy planning and implementation: thinking, doing, learning, and using the results as a feedback for new thinking. Following this methodology, a set of studies were conducted that would later be systematised in a comparative study. Results, however, are not submitted as national reports. Specific issues are presented in tables that allow for comparison of different variables for different countries: strategy formulation; communication, implementation and alignment of the strategy; strategic monitoring and control; and feedback and learning. This provided a comprehensive and

comparative perspective of strategic university management in Ibero-American countries.

The chapter concludes with recommendations for future research in topics like the professionalisation in university administration, changes in governance models, the effective monitoring of performance and improvements in the strategic planning process, and relevance of organisational learning in universities.

#### 4. Best Practice in University Strategic Management's Conceptual Framework

The fourth chapter provides the most practical issue within this book. It deals with concepts such as the definition of best practices, and most importantly it acknowledges criteria for their assessment and validation. Accordingly, formal issues of best practices identification and validation are extensively discussed in this chapter. The overall practical aim is to provide tools to identify and implement best practices in the context of strategic university management. This objective is accomplished by structuring the chapter in two main parts.

In the first place, a formal definition of best practices in university management is sought. The main tool of the analysis is the paradigm of the EFQM Excellence Model of the European Foundation for Quality Management. EFQM is used as a framework for analysis and forecasting the benefits of its implementation. The RADAR logic will then provide an assessment system for quantifying the results of the implementation of best practices.

The second part provides a model to identify, assess and accredit Best Practices in Strategic Planning for HEIs, using the EFQM model. This conceptual model includes the definition of the requirements and the assessment dimensions, and focuses on the content of good practice: its deployment, impact and the results it provides, its assessment and review, the innovations in it, how it can be reproduced, and the various benefits of its accreditation.

Overall, this book, armed with practical and conceptual underpinnings within the field of university strategic management, is aimed at helping executives, administrators, decision makers, policy makers, and other agents involved in the institutional management and regulatory sectors of higher education, to understand the challenges, solutions, and proposals posed by strategic management for each institution and institutional governance unit.

Accordingly, the book combines conceptual frameworks with relevant practical experiences to provide academic leaders and managers at different organisational levels with approaches to the self-assessment of diverse practices in the field of strategic management, as well as tested outcomes and results that might be useful in the improvement of the performance of their institutional management practices on their journey towards continuing excellence.

Finally, the book *Strategic Management of Universities in the Ibero-America Region: A Comparative Perspective* adds to the existing knowledge about strategic university management and contributes to high quality, suitable higher education for our societies, which are hoping for and truly need the voice and action of their universities.

# Chapter 1 Strategic Management in Universities: A Conceptual Framework Based on Ibero-American Higher Education Systems

#### Claudia Lucia Velandia Gomez and Michele Girotto

**Abstract** This article based on the exploration of different case studies in higher education institutions located in diverse Ibero-American countries proposes a redesigned conceptual framework to steer and reflect on the formulation and implementation of the institutional strategy. This conceptual framework is based on conceiving the strategy as a set of objectives and lines of action oriented towards the future, amid the many factors that influence its evolution. It is aimed at promoting a dialogue that leads to a well-constructed, coherent proposal that serves as the basis for an effective new model of strategic management for HEIs in specific contexts.

**Keywords** Strategic management • Higher education • Strategizing • Governance models

#### 1.1 Introduction

Around the world, financial constraints, the boom in information and communication technologies (ICT) and the gradual professionalization of university administration constitute a set of challenges that are leading institutions of higher education (HEIs) to make major changes, in terms of both internal organization and external projection. However, given that the administration of HEIs is closely related to their formal structures, the decision-making process and the implementation of procedures at both the governmental and institutional levels demonstrate that the progress that

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has been made with respect to these challenges at different institutions in different geographical regions may show certain uniformities and diversities; this leads to an interesting exchange, by means of collective learning.

Similarly, a number of international trends have affected the structure, governance and organization of institutions of higher education in many contexts; these trends include the increasing number of students, the range of activities that are supposed to be carried out, changes to the regulatory mechanisms for allocating public funds to institutions and rules that underpin the process of governance in universities (Rossi 2010). A brief review of the literature on strategic management applied to higher education illustrates the progress made in recent decades and explores the changes, problems and challenges of the university systems in different contexts (Hellstrom 2004; Henkel 2005; Jarvis 2000; Llinàs-Audet et al. 2011; Margolis 2004; Taylor et al. 2008).

Of particular interest in this regard are the studies focusing on how university administration seeks to provide answers to some of these challenges (Bryman 2007; Buckland 2009; Clark 2003; Martinez and Wolverton 2009). Likewise, some studies have taken steps towards recognizing the influence of culture and context in university administration (Gioia et al. 1994; Jarzabkowski and Wilson 2002).

At the same time, the market concept is framed by the vocabulary of HEI managers at various levels, along with the acknowledgement that higher education may be subject to market forces, although in some way moderated by the state. Thus, universities have been forced to compete for public and private research funding while trying to increase revenues from state funds and resources derived from their students. In this context, issues such as university rankings, the systems for accreditation of quality, reputation and excellence have become key factors for institutional success and may be influencing to some extent the way HEIs are managed. As such, HEIs must be able to adapt all of their services to satisfy the new demands of society, including those of the market, all the while remaining aware of their social commitment. Thus, in order to meet the growing demands of society at large, strategic management with its respective tools has become increasingly more central to university administration. This has come about with the aim of promoting an alignment between the way resources are allocated and the long-term vision and combining that vision with HEIs organizational capabilities while responding to the demands of the social, economic and cultural environment.

And concepts such as success, excellence, competitive advantage and innovation are increasingly linked to strategic decision making at HEIs. But how can we define the institutional success of institutions as complex as universities? According to Shattock (2000), we could say that the key words for highlighting the characteristics through which HEIs demonstrate their success include: competitiveness, exposure to new opportunities, income generation, cost cutting, suitability, excellence and reputation.

As such, in most OECD countries, which are undoubtedly familiar with the concept of the entrepreneurial university (Clark 1998), aspects such as organizing community participation and ensuring the legitimacy and effectiveness of

institutional governance are of paramount importance. Conversely, in many Ibero-American countries, the underlying debates revolve primarily around the democratic principle of collegiality and its application and impact on public universities and, secondly, around the principle of establishing corporate governance in private institutions (CINDA 2007). In this regard, identifying how these key concepts for success are present in the political and institutional discourses of different countries and their respective implementations also constitutes an inherent necessity for gaining a deeper knowledge about the continuous improvement of management systems for HEIs. In fact, we can see that HEIs have taken different approaches to the concepts of innovation, competitive advantage, reputation, quality and excellence, linking them to their social purpose. These responses have not been homogeneous and there are many factors that have intervened in this dynamic.

Throughout the literature, it is possible to find examples of institutions that tend to employ strategic approaches based on core competencies, such as that of Hamel and Prahalad (1996), or those based on resources and capabilities, such as that of Grant (1991). Nevertheless, adopting these types of strategic approaches still results in complex processes, since HEIs clearly operate in a difficult environment, with porous borders between the results and the markets. These institutions are sustained by collective intellectual innovation and the dispersed manner of the activities of faculty and research staff, in which intellectual capital quickly becomes obsolete unless appropriate routes are taken to ensure renewal of the research. In this regard, the concept of loose coupling used by Perrow (1984) may help to explain this particular organizational point of view of HEIs. This term describes organizations that operate without stable relationships between constituent divisions, in which actions and organizational processes can change, advance or regress without any dependence on the initiative or control of other parts of the organization (Glassman 1973; Weick 1976).

In light of these general observations on the strategy of HEIs and based on the exploration of different case studies in higher education institutions located in different Ibero-American countries, there are some concepts—without suggesting a new theoretical approach—that respond to the need for a redesigned conceptual framework to steer and reflect on the formulation of the strategy. This conceptual framework is based on conceiving the strategy as a set of objectives and lines of action oriented towards the future, amid the many factors that influence its evolution. It is aimed at promoting a dialogue that leads to a well-constructed, coherent proposal that serves as the basis for an effective new model of strategic management for HEIs in specific contexts.

The purpose of this chapter is to introduce the proposed conceptual framework as a point of reference for the development of university management systems within the HEIs in the Ibero-American region. This process starts by identifying and defining the processes of university management in the various countries comprising this region in order to ultimately put forward a critical review of these systems, the actors involved, the processes, the reporting systems, the expectations and the limitations.

#### 1.2 Study Approach

The conceptual framework is built around two elements. The first is based on the exploration of different case studies in the Ibero-American countries that are examined. This takes place through the analysis of institutional documents (e.g. existing strategic planning documents, training strategic workshop PowerPoint presentations, other strategy document references) and through the application of a specific survey directed at distinctive top and middle university academic and administrative managers across these institutions. The second element is based on comparing experiences of how university management is conducted with existing theoretical approaches to the analysed topic. These two approaches are elaborated on and discussed in parallel throughout the chapter. In terms of the document analysis, the applied methodology consisted of a qualitative analysis of the information based on content analysis (Weber 1990). In this analysis, the most frequently recurring topics in the documents were codified, identifying initial and emerging components, which can be observed in Table 1.1.

Likewise, attention is given to aspects on which convergence was reached about shared concepts. The said concepts, as seen from the implementation of the survey, have been considered relevant to the processes of strategic management at HEIs in the 16 analysed countries.

In fact, a definition was given for components or recurring themes that grouped the textual information that was provided. Those components were subsequently validated through a textual analysis of the definitions identified for each component in the submitted master document, which helped to define some emerging components considered to be important when addressing the topic of strategic direction. After defining each component, an analysis was conducted of the frequencies of words for each component to identify the most representative words; this was in order to analyse the context of these words, pinpoint the situations in which the participants used them and find commonalities and differences in their statements.

The analyses revealed some of the core themes appearing in the questions in the subsequent survey given to representatives from the participants' universities, as well as the aspects that should be considered in the drafting of a theoretical framework on the topic in question. The key issues that were found, that is, those with a score of 10 % or higher (this value was chosen since it marked a cut-off point for lesser scores), are shown in Fig. 1.1.

Given the classification of the information about each initial component, it was possible to determine potential emerging components and contextualize the most representative concepts related to each component. Drawing from the definition of these initial and emerging components, a battery of questions was prepared based on the codified components. Based on the question guide, a survey was designed and addressed to 24 higher education institutions in 14 countries (Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Spain, Mexico, Panama, Paraguay, Peru, Portugal, Uruguay) gathering responses from 54 participants, including executives and overseers of planning processes.

					White: initial component
		Black: emerging			
Content summary	Distribution of	component			
Components	No. of appointments	Number of encoded words	No. of paragraphs	Importance of the component (%)	Type of component
Interlinking of processes	22	3 536	247	13	
Interlinking of processes/ organization HEI	10	1,801	81	7	0
Interlinking of processes/ organization	5	1,060	32	4	•
Quality	1	263	13	1	•
Competitiveness	2	89	6	0	•
Strategy	22	5,247	284	20	0
Evaluation	15	4,739	454	18	•
Management	2	297	14	1	0
Management/financial management	5	2,096	96	8	•
Governance	0	0	0	0	0
Impact	0	0	0	0	0
Implementation	10	1,260	44	5	0
Information	6	2,644	404	10	0
Leadership	0	0	0	0	0
IHE external environment	13	3,104	169	12	•
Plan	9	4,818	278	18	0
Planning	21	4,271	179	16	•
Planning/strategic planning	5	765	45	3	•
Planning/regulatory planning	1	46	2	0	•
Planning/operations planning	1	34	1	0	•
Planning/participatory planning	1	38	2	0	•
Planning/prospective planning	1	135	6	1	•
Planning/systematic planning	1	38	2	0	•
Planning/tactical planning	1	44	2	0	•
Planning/planning system	2	1,210	106	5	•
Stakeholders	10	2,666	155	10	•
Balanced scorecards	1	101	7	0	0

 Table 1.1
 Overview of the most frequent topics addressed in strategic documents and survey

<sup>a</sup>Distribution of information-total word count: 26,796 for initial component/emerging component



Fig. 1.1 Core themes emerging from the content analysis

The results obtained were then used to define and validate the convergent concepts of strategic management and thus set the conceptual framework. This framework includes aspects of governance, reporting systems, management and monitoring, which are examined along with other perspectives and theoretical advances in the topic of study.

#### 1.3 Conceptual Framework for Strategic Management

Based on the results of the content analysis, this study proposes a conceptual framework for university strategic management, which is outlined in Fig. 1.2.

Based on reflection and analysis, this conceptual framework is intended to be an interlinked, coherent proposal that serves as the foundation for developing a sound model of strategic management for HEIs. For this reason, it is also possible to refer to it as a model of strategic direction. In fact, it can be used interchangeably. It should be emphasized that the validity of the conceptual framework (model) will depend on the underlying budgets, which are generally based on tacit assumptions and determined by the existing governance systems. In principle, a coherent alignment of strategy and resources is taken to be a clear reference to the legitimization of capabilities. One example of this is Spain, where the current climate of economic and financial crisis underscores the limitations existing in the model of governance at HEIs, particularly those in the public realm. The system used by the latter is conditioned by budget constraints derived from the public bodies responsible for it, which also determines any and all individual strategic actions.

According to this model, strategic management exists in the context of governance and a decision-making system, which in turn functions within an active planning system that is instituted as an ongoing communicative process. This system



Fig. 1.2 Conceptual framework for undertaking strategic management processes in universities

enables or facilitates implementation and continuous improvement by applying a mixed formula and by creating compatibility between the rigour and the agility of the process and between the leadership and the participation of a significant number of people. These elements are associated with the following actions: thinking–doing–learning–supporting concepts, which are closely linked to the main components of strategic management. The outlined components of the framework are discussed and analysed in the following section of this chapter, concluding with a critical reflection and insights.

#### **1.3.1** Components of Strategic Management

The conceptual framework that is a benchmark for addressing strategic management processes is built around the main components involved in an active planning process (see Fig. 1.3).

Within this active process, *supporting* is considered to be an underlying component of all elements of the model. This is because the process ensures that the other elements are based on the use of information so that they are not subjective and enable both decisive decision making and the process of evaluation and review for the purposes of continuous improvement. Likewise, *communication*, as an ongoing process, is also a transverse component. The model encompasses a broad



Fig. 1.3 Main components of strategic management

conception of evaluation, defined as activities that are carried out systematically to ascertain the performance of the institution at different levels (strategic, tactical, architectural) in order to take the necessary actions and learn from the outcome of the evaluation. These concepts require the learning to be continuous, and thus it is not only about obtaining a product (a plan) but actually about maintaining a system of dialogue, reflection and permanent monitoring to adapt to changes and glitches in the process.

Meanwhile, the variants that complement this model are governance and decision-making systems. It should be emphasized that the framework also applies the concept of strategizing (Jarzabkowski and Fenton 2006), that is, executing strategy in complex settings. Strategizing in pluralistic contexts poses the problem of promoting multiple conflicting strategic objectives. This situation arises from the competitive demands of the key stakeholders and, since one goal cannot be pursued at the expense of another, the need to promote objectives that are incompatible or even highly contradictory inevitably leads to conflicts. In this regard, in plural contexts, minor problems can indicate a lack of alignment between the fulfilment of external objectives and internal interests, which can lead to even greater complications. Therefore, it becomes necessary to promote frequent dialogue between top managers and other organizational stakeholders (internal and external) in order to establish a common ground for responding to the divergent interests and objectives.

#### **1.3.2** Approaches to Institutional Governance Models

Governance in higher education can be approached from different angles; hence, numerous authors have taken an interest in analysing this phenomenon in a variety of circumstances. As a starting point, we can take the definition used by Brunner in which governance is described as "the way institutions are organized and run internally—in terms of their government and management—and their relationships with external actors and entities with a view to ensuring the objectives of higher education" (Brunner 2011, p. 137). From this perspective, it can be suggested that the governance of higher education is possible to the extent that the two dimensions of governance (internal and external) are interfaced—insofar as universities are entities related to the state and not isolated from that context—while aiming to meet the expectations of a society that requires increasingly more effective systems to facilitate and support the universities' development.

Other authors have focused on the diversity of governance patterns within higher education reform in Europe over the past 15-20 years. Sporn (1999), for example, described the concept of shared governance, which revolves around negotiations, the role of stakeholders and the participation and integration of all the relevant constituent groups and objectives in higher education. Also along these lines, Braun (2001) discussed the model of corporate governance with an emphasis on the entrepreneurial character of HEIs and their efforts at strategic planning. According to this approach, universities are considered highly proactive and reactive organizations with strong academic participation in decision-making bodies. Also in the European context, authors such as Amaral et al. (2011) have prepared a substantial compilation of comparative studies on trends in management and governance in different international contexts; this work has shown that historical and cultural factors continue to have a considerable influence on how systems and HEIs respond in divergent ways to the underlying global social and economic trends (see also Amaral et al. 2010; Fulton 2002; Van Vught 1997). Likewise, a number of studies have made significant contributions in terms of providing different explanations for the phenomenon of governance and its respective changes and influences. For instance, Paradeise et al. (2009) produced an interesting comparison of changes in the governance of European higher education using a set of determining indicators. In keeping with Clark, the authors distinguished between Napoleonic governance, associated with the models of France and Southern Europe, which is characterized by a top-down model of state regulation, and the tradition of the Humboldt model of the university, more characteristic of Northern Europe, which consists of selfgovernment (collegial) by the academic community. Today, most European countries have made changes from a perspective that differs from these historical models because more focus is now placed on governance approaches related to management and competitiveness. This is reflected in indicators such as increased university autonomy within a framework of greater accountability to stakeholders, a trend towards emphasizing strategic planning and the universities' missions, the diversification of financing sources, greater autonomy for personnel as well as ex post quality audits.

Furthermore, in their exploratory study, Estermann and Nokkala (2009) analysed a crucial aspect of governance: university autonomy (see also Berdahl 1990). Based on empirical data from 33 countries, they outlined a trend towards greater autonomy in the organizational structures of universities. This dynamic covers aspects such as governing bodies, executive leadership and internal administration, along with issues related to personnel (recruitment and appointment, wage levels and the status of the academic functionary). This increased autonomy also applies to academic affairs and involves the ability of universities to define their own institutional strategies and academic profiles and to freely regulate the admission of students.

Meanwhile, Brunner (2011) reviewed the changing trends in the structures and processes of governance and management, with special emphasis on the Latin American region. In his classification, the author breaks down the governance systems into two main components: legitimacy and effectiveness. These components are in turn arranged into four quadrants: bureaucratic, collegial, stakeholders and entrepreneurs. According to this classification, the governance aspect is dictated by the principle of legitimacy, while management is based on the principle of effectiveness. These governance systems in place at Latin American universities reflect two trends: a "lagging" of public governance and the evolution of private governance. In this regard, there is one conception of autonomy that involves institutional autarky against national governments that are weak or ineffective in matters related to education; this is juxtaposed against the explosive growth of private higher education, obviously according to the circumstances and distinctive traits of each country. According to Brunner (2011), looking at the two (public-private) trends as a whole, these dichotomies and trends reflect present tensions, especially in Latin America, within cultures that adopt collegial systems or the entrepreneurial model, which are, respectively, governed by bureaucratic values-driven management or inspired by business practices.

#### **1.3.3** Approach to Decision-Making Systems

Based on the aforementioned definitions and reflections on governance systems, it seems necessary to consider the design of decision-making systems at institutions. These are conditional upon the governance systems in place, which may or not fulfil the objective of acting as a facilitator of the strategy implementation, although in many cases this will require major cultural changes. It should be kept in mind that the strategic decision-making process can lead to choices whose impact is far reaching and which require significant resources from organizations, entailing participation in various levels and functions within the institutions, all of which can lead to success or failure.

According to Pedraja et al. (2008), "strategic decision-making is a vital process of strategic management, since it is where organizations select their markets, choose their competitive position and build their core competencies" (p. 138); therefore, the design and implementation of strategic decision making constitute a vital task for senior management teams. The authors argue that HEIs' strategic decision making leads to better quality and ultimately achieve higher levels of efficiency. They suggest that to achieve higher levels of success in strategic decision making, senior management teams, when designing their decision-making systems, should conduct exhaustive research and thoroughly analyse the findings, develop equally exhaustive alternatives and carry out a rigorous and analytical process for selecting the strategic option to be adopted.

#### 1.4 Components of the University Strategic Management Framework

We will continue by breaking down the main interdisciplinary components of an active planning process: thinking, doing, supporting, communicating and learning. It is important to underline that these components do not constitute a static, unvarying process, but in fact they complement each other and are continuously nurtured by a dynamic and interactive process.

#### 1.4.1 Strategic Planning: An Active Process

When discussing an active planning process to ensure greater effectiveness of the strategy, it is important to highlight the development process involved, while initially clarifying the very concept of strategy. If we look at the specific literature, a variety of definitions of "strategy" are used, the best known of which are associated with Johnson and Scholes (1999), Grant (2002) and Mintzberg et al. (2003). One widely recognized definition of strategy relates to the idea of "a course of action for achieving the organization's mission" (De Wit and Meyer 2004). Within this definition, the process resulting from the creation of a strategy is referred to as strategic planning. This process is commonly regarded as a systematic procedure that can be summed up as follows: developing the mission statement and related objectives, conducting internal and external analysis, creating and comparing strategic options, making and implementing strategic decisions, evaluating and controlling. Despite the extensive and expanding body of literature on the strategy development process and the many existing schools of thought on the subject (see, e.g. Mintzberg et al. 1998), improvements in organizational practices resulting from strategic planning have been widely contested. In terms of the discipline of strategic management, the various lines of research have focused on independently analysing strategy practice and strategy process. The approach to study the strategy as practice deals with "how managers act and interact throughout the activities that constitute the decisionmaking process" (Whittington 1996).

In this manner, Whittington referred to the practice of strategy as a praxis that implies both inspiration (visionary aspects of strategy design) and transpiration (routines and procedures for implementing the strategy). From this perspective, the main focus is on what managers do and the procedures and routines by which the strategy is promoted. Therefore, this theoretical perspective of strategy as practice offers an insight into the ingrained habits and fragments of tacit knowledge that make up the flow of actions or events comprising the strategy process—in other words, an understanding of how strategy is derived from the actual practices that people regularly employ as part of their daily work (Jarzabkowski and Wilson 2002). This perspective also offers a broad vision about the conception of strategy as being within an active process.

Moreover, in considering the risk of strategic planning failure in the long term, Dyson et al. (2007) set forth a concept of *strategic development* as referring to "management processes that inform, form and support the strategic decision-making of an organization". The authors propounded a process involving establishing the direction, creating the strategic initiative, testing the strategy and evaluating performance. Dyson et al.'s (2007) study acknowledged that the traditional view of strategy development is deficient in some aspects, but these deficiencies can be compensated by improving the process or techniques used.

Therefore, based on the concept of *strategic development*, this conceptual framework considers planning within a system that facilitates the development of the mission and the achievement of the vision of institutions by effectively integrating the aspects of thinking, doing and learning. This can be expressed as follows:

Thinking	Understanding the institutional strategy (defining the purpose), which is based on					
	defining the mission, vision and values (these depend on the organizational culture					
	conceptualization. Thinking is also about discovering the expectations of the involved stakeholders, analysing the main critical factors, conceiving the most					
	likely future scenarios, identifying the strategic pillars and drawing up the vision and the strategic and operational objectives for each of the strategic pillars. This exercise in strategic thinking is reflected in the planning that links the "doing"					
Doing	Entails defining the implementation and delineating the framework used to specify actions and resources for achieving the strategy. This must be coordinated with the institution's operating model (processes–structure), taking into account the relevance of components such as communication, alienation, leadership and participation. The budget must be conceived as a reference directly linked to the strategy					
Learning	The necessary mechanisms must be put in place for monitoring and periodically evaluating the strategy development, along with a set of clearly defined instruments to ensure accountability. Learning also includes the continuous improvement of the institution, based on evaluation and review, supported by information so that decisions are transparent and objective. With regard to the continuous improvement aspect, the process of reflecting on the current work and its projection moving forward must meet the expectations that this type of exercise tends to create, and answers are needed to carve out the path of continuous improvement or otherwise face scepticism and frustration					

It is important to also determine the qualities or characteristics of the planning systems, namely:

- *Continuous*: A permanent, integrated and dynamic cycle between the components of the system (formulation–implementation–evaluation–improvement).
- *Collective*: Reflects the interests institutionally agreed on for reaching the established goals. Developing this attribute requires a commitment from the members of the university community, manifested through the creation of mechanisms that encourage voluntary engagement to ensure the legitimacy of the strategy being developed.
- Integrated: For the interlinking of all institutional processes.
- *Flexible*: Recognizes the dynamics of the environment and facilitates the adjustment of actions in its implementation.



Fig. 1.4 Development of the strategy as an active system

Figure 1.4 summarizes the components being proposed; it depicts the planning process as not linear but cyclical; that is, when the final moment arrives, it is already linked with an initial moment.

By approaching strategy development within the context of an active process, the expectation is that we can establish a cycle that is conducive to continuous improvement, which facilitates and promotes the following:

- Interconnection and synchronization: evidence of the nexus between the strategic planning, the organization and the expected results.
- Information-based decision making.
- Strengthening of the committees (decision making) and the organizational deployment (duties in management and structure).
- Clear connection between the strategic planning and quality of mission processes (undergraduate, postgraduate, research, knowledge transfer, external environment).
- Clear connection between the strategic planning and the financial requirements the basic elements of the budget prioritization are for programmes and services.
- Improvement plans resulting from the evaluation and monitoring process.
- Creation of a broad operational framework, for the purpose of thinking and changing the organization.
- Motivation of the commitment of academics and administrative staff to work together and achieve common goals.
- Understanding and dialogue on the institution's vision.

In the next section, we elaborate on the components proposed for an active planning system.

#### 1.4.1.1 Thinking: Strategy Design

The process or models for strategy formulation and development at HEIs are akin to the models employed in the business world, although certain nuances should be considered while observing them. Some studies have examined the trend for importing and adapting such models from the business world to the realm of higher education, such as Buckland (2009) study, which specifically explored the case of British universities. In this regard, Meyer (1982) argued that the main differences between strategic management applied to universities and private companies essentially relate to the underlying political nature of the decisions made, the demands for a decentralized and fragmented structure, the difficulties in evaluating the products resulting from the organization's actions, the lack of standards for measuring performance and the commitment to results.

Management and Organizational Structures at HEIs

Attention should be drawn to some complementary ideas on the management and organizational structures present in HEIs as a determinant of strategy formulation and design processes. For instance, Kast and Rosenzweig (1985) defined four main areas of management in their model of university organization:

- *Academic management*: This is the exercise of academic functions (teaching, research, external environment).
- *Educational service management*: This involves the day-to-day management of students, as well as the recording of their academic transcripts.
- *Economic and financial management*: This includes activities such as finance, accounting, procurement and management of support services, for the operation and maintenance of the university facilities and so on.
- *External management ('public relations')*: This involves institutional relations with the media, alumni, companies, government agencies and other stakeholders.

Drawing fundamentally from these four areas of university management, Hardy and Fachin (1990) described models of university administration that are patterned after those applied in complex organizations:

• *Academic bureaucracy*: Derived from the bureaucratic model of Max Weber and adapted by Henry Mintzberg for professional organizations. One example of this model at universities is the management of peripheral services (e.g. cafeterias, libraries, dormitories) and administrative management (recruitment, accounting, registration, financial decisions, etc.).

- *Collegiate:* The structural model based on the community involvement most widely used by academic organizations around the world. Examples here include the committees and boards of directors present at most traditional universities, particularly those in the public realm, where participants are the faculty, students, administrators and members of the community.
- *Political*: The university is a political system in which stakeholders exert power for personal gain. A good example is the process of drafting the university budget, which often results in the lion's share of funding being allocated to the most powerful instead of the most relevant in terms of size or even reputation.
- Organized anarchy: This is where there is little coordination and control, where each individual is involved in independent decision-making processes. One example would be the decisions made by departments regarding issues such as partnerships with companies and the reallocation of faculty and research decisions. In this model the university top management does not exert any type of control in this area.
- There is also the *cybernetic* model, proposed by Birnbaum (1988), which constitutes a fusion of the four models cited above.
- There is also a sixth model, not included by Birnbaum, the *market* model, usually found associated with private institutions of higher education (Kirp 2003; Morris 2010). With regard to the market model, several authors have associated it with the phenomenon of new managerialism in HEI management (Deem 2007; Deem and Brehony 2005).
- Hardy and Fachin (1990) argued that it is rare to find universities with only a single model. The most common scenario at HEIs is a mixture of all models (as we see with the cybernetic model), with one generally prevailing over the others. Therefore, the authors argued that university management must develop an approach based on a style that matches its size. In this respect, it has been observed that oftentimes issues related to shared governance, the role of leadership and the change from bureaucratic management to a more professional approach are matters of great concern.

In addition, there are a number of problems that affect higher education, and although many of these are not new, the social, technological, economic and political factors drive change according to how they are perceived. Accordingly, offering solutions to the organizational challenges facing HEIs also has been a major focus of the higher education research agenda, especially in terms of institutional adaptation (Cameron and Tschirhart 1992); restructuring (Balaram 2008); improving performance (Cameron 1984; Bolman and Deal 2003; Peterson 1995); responding to government reforms, institutional autonomy and scope of responsibility (Altbach 1998; Bok 2003); diversification of funding, strengthening the administrative core and professional management (Clark 1996; Jenks and Riesman 2002); and transformative leadership and quality of management (Bush 2000; Kogan et al. 2006).

All of these research efforts have aimed to contribute to endowing the university with a mission and objectives for structuring its routines and ensuring that its goals become more visible to the university community (Etzkowitz and Klofsten 2005; Van Gramberg 2006).

*Doing the strategy* presupposes that every institution identifies its distinguishing factor, namely, its ability to state what it offers and that those offerings are sustainable over time. When the strategy is defined, the institution's commitment to its future must be implicit; in other words, its duty is to take action with regard to organizational aspects of the institution and the provision of resources for its future. Another factor to consider is that the strategy is formulated in a defined context or, as many authors denote, the conditions determine the strategy formulation.

If those conditions were to change, the strategy would need to be revised. For example, a strategy to attract top-performing high school students with scholarships or financial aid is possible if the country's economy and the interest rates, where the resources from its endowment fund are kept, remain unchanged; in that case, it can be said that the designed strategy is feasible.

Based on these previous assumptions and based on the results of the content analysis within the analysed institutions, the following subsection explores some aspects to be considered when thinking about and formulating the strategy as part of an active planning process.

Strategy Formulation: The Strategic Plan

Strategy formulation should be framed within a strategic management system, which makes it possible to decide on the institution's mission and vision, define objectives and actions, ensure resources and make a comprehensive internal and external diagnosis. Therefore, strategic management involves a cyclical process—a combination of planning, execution and evaluation—that should include several levels (institutional, sectoral, units, individuals).

This process (planning, execution, evaluation) is defined through the formalization of a strategic document, which becomes the roadmap that the university depends on to reach the desired direction. Figure 1.5 contains a proposal for the key definitions and questions, which can serve as a straightforward guide for institutions in the process of formulating their strategic documents.

Two components should be included in the formulation of the strategic document: the various agents (both those involved in the decision-making processes and those who execute the plan) and financial resources. Likewise, financial decisions must be aligned with the mission and strategic management of the institution; hence, the formal and informal aims of the strategy document must be clear in order to help choose the means. The strategic document should not be a compendium of unrealistic goals, since this could doom it to failure; therefore, it is important to determine the total cost of the activities, goals and priorities. The budget issue is of fundamental importance, since the management and leadership systems at HEIs must deal with resource allocation, as no institutional initiative can be successful without the necessary resources.

Therefore, it is important to align the institution's annual budget with the execution of the strategic document, because in practice resources can be diverted along the way to serve particular interests and contingencies or create momentum that

MISSION									
The university's purpose, serving as it statement of introduction to others and a delimiter of its scope of responsibilityCLEAR, CONCISE, COMPREHENSIVE									
BASIC PURPOSE									
WHAT DOES IT DO? WITH WH			WHAT?	FOR WHOM?	FOR WHAT?				
VALUES									
	The institution's beliefs regarding the behaviours considered correct and valuable								
			VISION						
		vision	is an image of a	ı result					
	The pla	ce that developm	ent of the prop	osed mission leads to					
WHAT DO WE WANT TO BE?	HOW WILL IT BE?	HOW WILL WIT WORK?	WHAT WILL ITS IMPACT BE?	WHAT DO WE NEED?	DISTINGUISHING NATURE				
			GAPS						
	Di	stance between th	ne observed and	expected values					
DOES THE QUALITY OF WHAT'S BEING DONE MEET EXPECTATIONS	ARE THE RIGHT PROFESSORS BIBL IN PLACE? 7	ARE THE PHYSICAL IOGRAPHIC AND S ECHNOLOGY RESOURCES SUFFICIENT?	ARE THE PROCESSES UPPORTING THE STRATEGY ADEQUATE?	ARE THE NECESSARY ORGANIZATION AND MANAGEMENT IN PLACE TO ACHIEVE THE PROPOSED VISION? DO THE THE IN HAR EXPECT ON S	EFFORTS OF HAS THE STITUTION COUNTRY'S SCIENTIFIC TED IMPACT BEEN SOCIETY? BEEN FOSTERED?				
		S	TRATEGY						
ACHIEVE	Def A DISTINCTIV	inition of the nee E QUALITY TH	cessary actions IAT IS SUSTA	to bridge the gaps INABLE FOR AS L	ONG AS POSSIBLE				
STR	ATEGIC MAN	AGEMENT		PLAN					
Describe how achieved	the proposed obj	ectives will be	Establishe leaders an and fulfil	Establishes objectives with the actions, goals, leaders and resources needed to carry out the mission and fulfil the vision					
STI	RATEGIC OBJ	ECTIVES	С	PERATIONAL O	BJECTIVES				
These are the major challenges identified for achieving Those objectives that link strategic objectives to the actio the institution's vision for the future, and are therefore that the institution must carry out in order to fulfil its lon associated with the strategic management. Should be: distinguishable, viable, few, orientating actions									
			ACTIONS						
A series of activities needed to achieve the stated objectives, making it possible to specify leaders, timetable and resources. Given their precise nature, they can be the basis for designing the system for monitoring the plan with a defined set of indicators									
			GOALS						

These are the results achieved by carrying out the proposed actions and thus they are specific, realistic and associated with the obtained values.

Fig. 1.5 Guiding principles behind the formulation of the plan

ultimately causes the institution to veer off its intended path. The strategic document should be associated with a budget that clearly states the expected result. Thus, there must be cash flow to cover the full duration of the planning period and account for the income and annual costs; this synchronization is supported by budget policies with a long-term agenda to incentivize the creation of endowment funds and the procurement of additional resources or the diversification of income.

One major obstacle for institutional planning and resource allocation strategies is the fact that income tends to be very limited, which can make the process less flexible. As noted by Johnstone et al. (2006), from a cost standpoint, these problems can be solved by improving efficiency and reducing spending, and, in terms of funding, complementary sources can be considered and identified. In these situations, it is important to develop competitive advantages by developing a sequential process for identifying resources and capabilities, then choosing and committing to strategies. According to the perspective proposed in the conceptual framework, the strategy document is a road map to lead the institution from where it is now to where it would like to be within an established time frame. Therefore, it must be a clear and transparent tool, based on an analysis of the current situation, and must establish priorities for the institution, guide its actions and ensure flexibility and effectiveness.

Nevertheless, in the academic literature, this management tool is not without its opponents and critics. Morphew and Hartley (2006), for example, argued that all the elements surrounding the strategic planning process—interlinking the mission and defining the vision—are based on "old anecdotal evidence". Delucchi (1997) described strategic planning as a dominant regulatory process which organizations use to show they understand the rules of the game and that give them a certain legitimacy. In this regard, strategic planning at HEIs is further contested in the literature, where it is commonly defined as mere rule adherence or regulation and lacking in real strategic meaning (see, for instance, Knight and Trowler 2001; Prichard 2000). In fact, many studies have explored the successes and failures of the implementation of the strategic planning tool. Meanwhile, what actually fails in many strategic plans?

One important aspect is to ensure participation and the legitimacy of the process from the outset and then clearly inform the entire university community about the purpose of the project, the composition of the planning committee (where applicable), details regarding participation and deadlines and the forms of communication and information (i.e. the intranet) through which everyone is properly informed and encouraged to participate. Those responsible for the process should organize working sessions to define the mission and values, discover the expectations of the stakeholders involved, analyse the critical factors, conceive the most likely future scenarios, identify the strategic pillars and lay out the vision and the strategic and operational objectives for each one.

There are several methodologies for understanding the factors conditioning the formulation of the planning process, such as market analysis, strategy maps, scenario building, positioning analysis and so on. As observed in the content analysis of the strategy documents of the universities considered in this study, the most frequent methodology was the SWOT analysis. According to this methodology, the

process begins with the development of a diagnostic to evaluate what happened when the previous strategic document was in effect, as it pertains to the challenges to be faced by the institution in the coming years. Therefore, certain instruments are needed to facilitate the evaluation and review process. In cases where no previous strategy document has existed, the behaviour of the institution itself to date is evaluated. The diagnosis can comprise the following activities:

- · Study of the environment, through which opportunities and limitations are assessed
- Assessment of stakeholders with respect to the offerings of the institution in its various processes related to its mission, strategy and support
- Other complementary assessments such as:
  - Evaluation of the results of previous strategy plans in accordance with proposed strategies. It is vital to have mechanisms to provide reference sources for critical information, as opposed to descriptive information, and reporting mechanisms to ensure effective feedback for the whole process.
  - Growth models for the population of the institution.
  - Benchmarking studies, which uses the institution as a reference for comparison with others based on the proposed strategies.

To ensure that the process is dynamic and active, those responsible can organize participatory workshops, open to everyone in the university community, which can include benchmarking exercises concerning the actions that each involved actor considers optimum for achieving the proposed objectives. These workshops should ensure broad participation among the various stakeholders on a voluntary basis as this adds legitimacy to the strategy and the plan. Finally, a small working group from the committee in charge of the planning process should analyse the proposed actions and evaluate them according to degree of importance, urgency and viability, especially in terms of the effort that will be entailed at various levels.

The idea is for the actions to be prioritized within each strategic area, denoting the most important, most urgent and easiest. Based on the selected actions, a person is assigned responsibility and asked to submit a project specifying the proposed strategy for meeting the established objectives, the indicators expected to be used to measure the effectiveness of the action, the goals it aims to achieve, the resources that need to be added, the development schedule and the evaluation methodology to be applied. Therefore, within this dynamic process, the strategy formulation process should consider and prioritize the interests of the various groups involved in the work of the university; it should also consider how to listen and respond to the needs and expectations of students, professors, employees, graduates and other stakeholders.

Similarly, strategy formulation should provide for the following conditions:

- Demands of an increasingly globalized economy:
  - Recognition of the institution's "product" in a domain that is increasingly interrelated and integrated globally
  - Inclusion of graduates in the expanded labour market

- Equivalence and recognition of degrees and studies with national and foreign universities
- Joint research in global networks
- Constraints on resources:
  - Diversification of income
  - Rationality of proposed expenditure
- Conditions of the national environment:
  - Links between knowledge production and the problems facing the country (industry, public policy, economics)
  - Government provisions in affairs related to education policy and evaluation (financing, accreditation, graduation requirements)

In keeping with these premises, the strategy must address specific situations that can be considered as gaps that it should bridge. In Fig. 1.6, adapted from Velandia (2011), there is a definition of a quadrant between the variable expected to be modified and time. The difference between the slopes of this relationship derives from the efforts required to achieve the desired impact on the said variable within an expected time frame. For example, coverage can be increased in less time if more resources are available for receiving students or the same goal can be achieved over a longer period of time with fewer resources. This decision firstly depends on the institution's ability to meet this requirement and secondly on whether this action will have the greatest impact within the strategy chosen. As such, the decision must be supported in order to achieve the desired changes, although it may also require an additional influx of resources.



Fig. 1.6 Definition of the gap




Thus, it is possible to size up the strategy using a matrix, as shown in Fig. 1.7, which plots it in four quadrants so that its design allows for a specific type of strategy to be formulated, as the figure proposes.

When analysing the environment, attention should be focused on the key elements influencing the conditions of the external environment and on the requirements of stakeholders with respect to establishing the differentiating factor that every institution should have, which in the business world is called *competitive advantage*. These elements should be considered when the institution sets out its mission and vision. All HEIs operate in the same space; therefore, the way each one views the demands of the environment and the stakeholders involved will ultimately give its position a differentiated quality. It is expected that upon conclusion of this analysis, the following question can be answered: Where is our direction of travel and whose needs are we meeting?

Thus, analysis of the external environment provides determinants on which the strategy can be formulated, as it includes the understanding of current and future changes affecting the work of the institution. This understanding will make the strategy consistent with these requirements. Though it may seem obvious, the institution should define the geographical environment in which it hopes to be developed, as its approach to strategic management will depend on that definition. In other words, the demands are not the same in a local or immediate environment as they are when the institution has greater aspirations and aims to operate in a global environment. Each of these elements has its own different complexities; at the end of the exercise, the institution will be able to answer the following questions:

- How does the institution want (for itself and the programmes it offers) to be regarded in the chosen environment?
- What characteristics should distinguish the institution, in terms of its mission and vision?

- In the selected environment, acknowledged to be undergoing constant change, what is the profile of the programmes and the community with which the institution seeks to determine its presence, positioning and recognition?
- What role and positioning are desired for the institution? And what impact should it have on the given environment?
- What lasting contributions does the university aim to make?

It is possible to say that this review has two angles: the first involves understanding the constraints of public and regulatory policy in the sector, while the second entails looking at the opportunities offered by the environment with its given dynamics. When talking about the conditions of public and regulatory policy in the sector, the expectation is to be able to answer the following questions:

- What is the importance of higher education in the government's current development plan?
- What regulatory incentives and constraints does the institution have in the environment in which it operates?
- What are the conditions for quality assurance, financing and incentives that determine the institution's development?

At the same time, the environment presents certain opportunities that can be identified according to the following questions:

- What are the demands of the labour market?
- What is the population growth like?
- What are the requirements of the industry and the public and social sectors?
- What are the socio-demographic conditions of the stakeholders?
- What are the macroeconomic determinants of the institution's development?
- What learning competencies are required for the global environment in which graduates find themselves?

Analysing the environment should enable conclusions to be reached that enable decisions to be made about strategic management. If the results of this analysis fail to make an impact or are not considered, the process will merely be the result of a documentary exercise without any relevant effect on the institution's planning. Simple tools that allow the result to be clearly seen should be looked at. This analysis should give consideration to the vision and mission of the university; if these have not been established, then at the very least it should be clear which direction the university expects to take, and then the results should be used to help pinpoint this aspect.

The following Figs. 1.8, 1.9 and 1.10 show two possible ways of summarizing the results of the environmental analysis. The first of these ways can be done by choosing four dimensions, or a maximum of eight, by which to identify aspects that could shape the strategy. Graph 8 suggests analysing four facets of the environment, namely, national policy, differentiation, quality and market. The idea is to identify certain variables in each of these categories and pinpoint the behaviour of the institution in relation to each of these.



Fig. 1.8 Quadrants for analysing the environment (hypothetical percentages for demonstration purposes)



Fig. 1.9 Quadrants for analysing the environment placing the institution's behaviour (hypothetical percentages for demonstration purposes)

As Fig. 1.8 shows, each quadrant indicates the behaviour of the institution within the established categories. In the end this may help to answer questions that guide decisions, such as:

- State policy conditions: What are the conditions for financing and promoting higher education?
  - Percentage of GDP on science, technology and higher education.
  - Percentage of students financed with government funding.



≤ POTENTIAL ≥

Fig. 1.10 Analysis of the constraints and potential of the environment

- Differentiation:
  - What is the expected target population?
  - What are the distinguishing characteristics of the institution?
- Quality: What are the demands and the value placed on quality in the environment in which quality is expected to be delivered?
- Market: What are the conditions for the employability of professionals?

The second way of illustrating the results is shown in Fig. 1.10, which shows a type of analysis using the intersection of two dimensions: the constraints and the potential. In the example given in the graph, the defined strategy should focus on the financial issue, as this is one of the most important constraints imposed by the environment.

In principle, if HEIs are "multiproduct" institutions, there may be many stakeholders affected by the action or inaction of these institutions. Stakeholders largely determine the work of the institution; therefore, the following questions must be answered:

- Who are the stakeholders?
- What are their needs, desires and expectations?
- What motivates them to interact with us?
- How satisfied are they?

At the same time, satisfaction could be the extent to which stakeholders believe the service meets or exceeds their expectations. It should be kept in mind that their expectations can be met by others; therefore, it is essential to know how to maintain the preference of stakeholders for the institution. When it comes to gauging satisfaction, at least two things must be considered:

• What? Satisfaction with the services offered (teaching, research, external environment)



≤ satisfaction≥

Fig. 1.11 Sample evaluation matrix for importance vs. satisfaction according to the interests of the student group, a hypothetical example

• How? Satisfaction with the format (e.g. face to face, online), timing (opportunity for the service), mode (pedagogy), quality of support services (responsiveness, payment time frames, etc.)

Strategic analysis is a methodology that relates importance (i.e. the amount of value that this attribute has for stakeholders) to satisfaction (how are expectations met with respect to the offer). This analysis contrasts importance and satisfaction in a quadrant to assess the importance of that attribute to the strategy. Figure 1.11 shows an example with some of the factors students take into account when choosing an institution such as quality, well-being, employability, computerization and internationalization. In the hypothetical example, the quality of the programmes for students was placed in quadrant II where the result equates to *very important* and *very satisfied*, while employability appeared in quadrant I with the values of *very important* but *not very satisfied*. The strategy should consider these situations given that they could be offering programmes that are of a high quality yet decontextualized from their immediate environment.

Evaluations that are complementary to the study of the environment and the stakeholders' interests must account for the performance of the institution to date. If a plan exists, then an evaluation should take place regarding the success of any of its strategies; if not, then at the very least the inertial dynamic on which the institution has developed should be examined. The evaluations should respond to the following questions:

- What growth has the institution experienced in terms of its population, programmes offered, teachers and other indicators that take its performance into account?
- How close or far is the institution from the institutions with similar offerings or those that can be used as a reference?
- Were the strategies chosen in other plans effective, and is it possible to measure their impact?

Analysis	Example of product	Description
Strategy	To growth in undergraduate enrolments should we be more tax in admission?	Strategy analysis, evaluates the impact on the institution's decisions. Example: the strategy is to grow the population with quality students. Question: Has the admissions process been lax to allow for growth? Headquarters: balance between growth rate per unit with good exam admission index. The orange quadrant would show units that grow with quality students and in blue those that show growth but with poor quality students
Growth	Veors	Evaluates the dynamics of the institution's growth in relation to the demand for resources. Question: Has the faculty plant grown at the same rate as the population? No. As we can see in the graph, professors have increased at a rate of 1.1 vs. 1.3 for students
Benchmarking	Where is the university and how can it be improved?            Best practic (3), court must frequently in a group of praminest         Linkowskie (not exclusion)             1         2         3         4         5         5         Courter to ECGUART a st	Provides a reference point on where we are in relation to the others and helps identify gaps and ways to respond. In the graph, the practice to be compared is set on a scale of 1 to 5. The importance of the exercise is to know how other institutions are in a given place and learn from that experience.

Fig. 1.12 Other evaluations conducive to a good diagnosis

Answering the previous questions, it is possible to do three evaluation exercises on these dynamics, namely:

- Evaluation of the growth in relation to the demand for resources such as teachers, physical facilities and technological support
- · Benchmarking study of issues considered strategic for the institution
- Assessment of the strategy's impact

Figure 1.12 shows these methodologies with some examples to help explain the approach to evaluating the results or making a diagnosis as a means of supporting the plan's formulation.

## 1.4.2 Doing: Implementation, Communication and Alignment

Strategic management is often divided into two stages: formulation and design of the strategy and implementation of the strategy. The purpose of implementation is to ensure that the formulated strategy (usually abstract) designed by an organization's strategic apex is aligned and clearly present in its daily work and operations. Without the proper attention and resources to ensure implementation, it may be difficult for the new strategy to efficiently reach the operational base of the organization. This is extremely important since there are many examples of cases where carefully planned strategies have failed due to a lack of proper implementation. Therefore, the strategic planning process should always include specific measures for implementation. From this perspective, the design, formulation and implementation of strategies are not actually different stages but rather a continuum of strategic management. The implementation component is clearly an issue to focus on for many managers at HEIs, as it continues to be one of the most problematic.

In fact, strategic implementation is a topic widely explored by academic literature in terms of private enterprises as well as public and professional organizations (Chance and Williams 2009; Heide et al. 2002; Sullivan and Richardson 2011). There are several theoretical perspectives regarding strategy implementation. Often, these perspectives are closely linked to the contingencies of the contexts and organizational structures; in the case of HEIs, they have mostly been linked to bureaucratic management structures.

As a general rule, the bigger the organization, the wider the gap or void between the strategic apex and the operating core. In large, hierarchical organizations, it is usually more difficult to implement the strategy; the "strategic message" can simply reach a certain organizational level (middle managers) and never extend beyond that to reach the "base of the pyramid". Moreover, in the worst case scenario, it may take a long time before the organization's senior management even becomes aware of this issue. Therefore, middle managers in particular are most often the ones responsible for "transmitting" strategic messages within organizations (Aaltonen and Ikävalko 2002).

While the university vice chancellor can, for example, organize a briefing for the various agents on a new strategic plan, middle managers are ultimately those responsible for ensuring that the strategy is carried out in the daily and operational work of the organization, through tasks involving communication, motivation and monitoring. Without this involvement at the intermediate level, there would be a gap between the strategic apex and the operating core, and this would result in the formulated strategies being not put into practice, as illustrated in Fig. 1.13.

Thus, in the process of formulating the strategic plan, it is possible to opt for a simultaneous bottom-up/top-down strategy or one based on collaboration rather than confrontation. For example, the institution may define an initial approximation of its vision and then work with the academic and administrative units on their individual visions, since it is acknowledged that different levels of maturity exist within the institution.



Fig. 1.13 Gaps and voids in strategic implementation

The case could be that one department is very mature in its research processes while another is not, thus requiring a stronger push than that given to departments where there are more established processes. Subsequently, whether the originally formulated vision reflects the interests of all units and is viable in the set time frame can be re-evaluated. The plans of academic units or action plans seek to handle the interface or interlinking between the planning of the university as a whole and that of the individual academic units; thus, coordination must be designed to ensure the sustainability of the mutual agreements. The results of prioritization of the action plans will also include a list of initiatives that can be developed by faculties, schools or the different academic units into which the university is arranged, such as departments, divisions or programmes. Conversely, the plans of the administrative units will be carried out at the end of the formulation of the plans of the academic units in order to support the initiatives they contain.

Figure 1.14 illustrates how this process can be associated either with the plans of units that recognize the particulars of decision making or with major issues in order to achieve economies of scale.

The process of developing action plans involves the following components:

- Knowing about the initiatives of the various academic units (faculties and departments) and interlinking them with institutional goals
- Prioritization based on criteria established by the collegial body that has strategic decision-making power; for example, the impact on the vision, economies of scale, recurring needs and so on

Action plans may include detailed actions for achieving the institutional strategy and defining policies, programmes, budgets, specific activities and leaders.



Fig. 1.14 Coordination between the planning of the university and its individual units

These plans can be formulated with a shorter time frame in mind than that of the institutional strategy document (e.g. annually), and therefore they require an equally specific schedule. Insofar as action plans or unit plans are simple in their formulation and specific and achievable, the strategic plan will be a fact. Figure 1.15 sets out the minimum content of an action plan or unit plan.

One of the traditional and most commonly observed critiques of strategic planning is that it is a mechanical process that is developed through a sequence of linear steps. In this process organizations are encouraged to define a mission and develop a vision, create objectives and generate the corresponding measures of performance. Lastly, there is an evaluation process for estimating the effectiveness of the programme. Although the sequence of steps is theoretically interesting, in reality effective strategic planning is not necessarily a linear process, as different phases and components can exist at the same time, merging into or occurring outside this sequence. Likewise, some steps may require review, along with further information or additional ideas by strategists. Indeed, there are similarities and differences between the institutions that make effective use of strategic planning, or certain elements of it, as a strategic tool.

In this context, as Fig. 1.16 suggests, every institution should define its value chain. In general terms, the chain represents the major activities carried out by the institution and, at the same time, how it provides its distinguishing quality, taking



Fig. 1.15 Relationship between the strategic plan and the action or unit plans



Fig. 1.16 Value chain proposal

into account its particular structural and cultural attributes, which are aligned with its strategic development. The chain is the general representation of processes (i.e. mission, strategy, support) whose interaction maximizes the university's mission, ensuring sustainability (non-profit institutions) and the recognition of society in general.

Hence, making the strategy work may be more difficult than the actual process of developing the strategy. According to Hrebiniak (2006), one basic problem is that managers know more about the formulation of strategies than they do about their implementation, since most of them have been trained to plan, not to implement plans. Other issues emphasized by Hrebiniak are related to the view of formulation and implementation as two distinct parts of the strategic management process.

Therefore, better strategic results are achieved when those responsible for the implementation are also part of the policy-making process. The greater the interaction between the "doers" and "planners", the greater the likelihood of a successful implementation. Linking strategic objectives with the day-to-day objectives and the concerns of staff at different levels of the organization becomes a legitimate task, but it is also a challenge. The more people involved, the greater the challenge of effectively implementing the strategy.

In the content analysis, the issues of greatest concern—opportunities for improvement in terms of the problem of launching the strategy and keeping it alive in dayto-day operations—involve the existence of partial visions of the strategy, lack of commitment, ineffective communication and reporting mechanisms that oftentimes are more descriptive than truly strategic in nature. These problems coincide with the arguments presented by Hrebiniak (2006) and Sullivan and Richardson (2011) who discussed the main obstacles standing in the way of a successful implementation such as lack of guidelines or a model to steer strategy implementation efforts, an inefficient or inadequate exchange of information between the individuals and units responsible for implementing the strategy and the lack of clear responsibility and accountability for the implementation of decisions or actions.

Based on these issues, there are some variants that should be considered in the implementation processes that are especially relevant in the context of the governance of HEIs today—these are repeatedly emphasized and codified as convergent issues associated with the universities' planning processes. These variants are related to communicating the strategy, as well as achieving legitimacy by consensus and commitment to the alignment of the strategy.

#### 1.4.2.1 Communication

Numerous researchers have highlighted the importance of communication to the strategy implementation process (see Alexander 1985; Forman and Argenti 2005; Heide et al. 2002; Peng and Littlejohn 2001). Alexander (1985) pointed out that the issue of communication is mentioned more frequently than any of the other barriers that influence strategy implementation. Similarly, Peng and Littlejohn (2001) argued that effective communication is a key requirement for effective implementation;

organizational communication plays an important role in the dissemination of knowledge and learning during strategy implementation process.

In fact, communication is a phenomenon that permeates all aspects of implementation. In a complex way, it is related to the organization of processes, the context of the organization and the objectives for execution, which in turn have an effect on the implementation process. Along these lines, Rapert et al. (2002) suggested that communication and a shared consensus play an important role in the implementation process. Specifically, when vertical communication is frequent, strategic consensus (shared vision on strategic priorities) is enhanced and organizational performance improves. The authors explored vertical communication links as a means of reinforcing strategic consensus and performance.

From another perspective, strategic planning is linked to a communicative process, especially when it comes to implementing it. From this point of view, strategic planning is seen as an important element for communicating an organization's strategy, both internally and externally (Bartkus et al. 2000; Beer and Eisenstat 2000; Mintzberg 1994). While most of these authors have assumed that communication occurs after the plan is formulated, others have suggested that communication is equally important in the formulation of the plan itself (see, for instance, Grant 2003; Ketokivi and Castaner 2004; Lines 2004). According to this perspective, some authors have reconceptualized strategic planning by conceiving of its development through a communication process.

This vision goes beyond the viewpoint commonly observed in the field of strategic management, which considers communication as a process that occurs after the formulation of the plan; rather, the plan is viewed as an emerging text that shapes and is shaped by the communication process. Spee and Jarzabkowski (2011) suggested that the strategic plan is not only the result of planning-related activities, but it also shapes the planning of activities that take place during its development process, whose dynamics are in constant construction. Thus, a strategic plan is not a static document that promotes inflexibility, as held by Mintzberg et al. (1998), but is in fact dynamic and has effects on the organization through the interactions that take place in day-to-day operations. In this respect, the issue of participation in strategic planning, another variable that is strongly present among the content analysis, denotes that it is also part of the communication process (Mantere and Vaara 2008) and constitutes a determining factor in the success of the implementation. Even though many people participate in strategic planning activities and are therefore able to express their concerns and suggest modifications to the content of the strategic plan, only a few, due to their rank and position, are truly capable of modifying the contents of a strategic document.

Thus, the suggestion is that an institutionalized process of strategic planning must provide a platform for the creation of meaning for the individuals in the organization. This creation of meaning occurs as the different agents take part in strategic planning cycle and reveal their interpretations and opinions about the content of the plan while it is under construction (Spee and Jarzabkowski 2011). Therefore, the communication process by which the plan is constructed represents the consensus and hence gives legitimacy to the plan. As a result, the conceptual model being

proposed considers strategic management as being within an active and dynamic process that is under constant construction.

#### 1.4.2.2 Consensus and Commitment in the Alignment of the Strategy

The role of consensus and commitment as a means of aligning and integrating the approach at various organizational levels is closely linked with the communication process and the interlinking of the strategy in the internal units. Thus, consensus on an organization's strategy may vary according to the organizational level: if members of the organization are not aware of the same information or the information is differentiated, the resulting consensus will be diminished. This lack of shared understanding can create obstacles for strategic implementation (Noble 1999). Dess and Priem (1995) defined consensus as the level of agreement between the members of senior management or the dominant coalition on factors such as objectives, competitive practices and perceptions of the environment. They believed consensus is the result of the strategy-building process and saw it as a critical factor in the settlement of disputes and in promoting unified leadership of the organization; this increases strategic commitment and reinforces the successful implementation of a particular strategy.

Strategic commitment reflects the identification, involvement and dedication of the functional areas of the organization in terms of strategic decisions (Wooldridge and Floyd 1990). Therefore, while strategic consensus reflects the belief that the strategy is suitable for being carried out, strategic commitment evaluates the degree of willingness to focus efforts and resources on accepting and implementing the strategy. Shared consensus without strategic commitment from the functional areas can lead to resistance and adversely affect performance. Therefore, the efforts put into implementing the strategy could fail if the strategy lacks the support and commitment of the majority of the middle managers and actors in the university community. This could happen if they were not consulted and involved during the plan's development phase (Heracleous 2000), which once again highlights the importance of conceiving an effective communication process that is integrated and aligned throughout the development of the plan within a living, dynamic and active process.

Flaws in the strategy are often attributed to shortcomings in the implementation, namely, the lack of alignment. Thus, information becomes a key resource in achieving alignment, and the presentation of that information and "acceptance" of the contents and objectives by the various stakeholders constitute a certain degree of alignment. Approaches such as the *balanced scorecard* (Kaplan and Norton 1996), for example, act as mechanisms for alignment, providing information about objectives and, moreover, a tool for measuring its achievements, which motivates stakeholders to "buy into" the strategy. In practice, it is evident that implementation and alignment are not simple tasks. However, alignment failures occur because oftentimes the strategy communicated to the main stakeholder groups is not received by them and fails to take adequate account of the matters that are fundamental for alignment.

# 1.5 Learning: Evaluation and Review

The mechanisms necessary for monitoring and periodically evaluating the chosen strategy should be included in the active planning process. The concepts identified in the content analysis converged on the need to identify and use instruments that are simple and based on reliable and timely information for decision making. In this regard, it is suggested that the monitoring system is most effective when a platform is designed for managing information to assist decision making. This entails managing the information based on institutional criteria, in terms of the categorization and assignment of attributes to each of the categories defined. Similarly, that information should be structured according to the concept of university autonomy or around the areas in which decisions are made, which are mainly academic and administrative. Thus, it is grouped from the broader (category) to the more specific (attribute), as suggested in Fig. 1.17, with the main concepts as follows:

		IDENTIFICATION	Origen				INCON	MES	Туре	Enrolments
			Socio-ec	onomic	1					Research
			Basic ski	ills	1					Donations
		DEVELOPMENT	GPA (gr	ade pointing	1					Consultancy
			average)							-
			Credits t	aken	1					Others
		SUPPORT	Financia	1	1	2	EXPEN	ISES	Type	Operational
	s		Integrate	ed (Philological,	1	2				Non-operational
	ent		spiritual	)		E E				
	pn	EXTRA	Culture		1	Z	PLANN	IING	Financial	Assets
	Š	CURRICULAR	Sports		1	ш. Ш.			structure	Liability
		STATUS	Active		1					Equity
			Non-	Suspended	1				Costs centre	Function
			active	Academic test	]					Expenses
		LABOUR LINKS	Monitor		1				Plan	Transaction
			Graduat	e assistance	]					Investment
		EXIT	Degree							
				Thesis	]		١L		Links	National
		IDENTIFICATION	Basic inf	ormation (origin,			Ž			International
~			genre, family)				10			
Ľ Ľ		Education Other qualifications		n			5	<u>۱</u>	Government	Board of governors
8						T			Academic council	
E		RELATIONSHIP Lecture Chair			LSI			Faculty council		
S							4			Department council
ŭ	lty		Visiting						People	People
Ā	acu		Assistant							Position
OE	Ľц.		Associat	ed						Structure
N.			Professo	r					× -0-00	Well being
AC		ASSESSMENT	By the s	tudent					ICT	Infrastructure
			By the n	ead of the		H	s			Architecture
		PESEADCU	Droducti	vity	{	ZE	CE			Systems
		RESEARCH	Dublicati	vity	{	Œ	R.	Inf	has senterenteen	Areas
		IDENTIFICATION	Fublicat	IOIIS	{	5	lõ	1	laboratoriae	Licaga
		ibertification				N N	ES		aboratories	Cauge
		LINK			1	E	~		Library	Books and collections
						Σ				
		ASSESSMENT			1					Usage
		OFFER	Undergr	aduate	1				Archive	Active
			Master		1					Non-active
			Doctora	l studies	1				Strategic	Accreditation
			Continua	al education	1		ш			Quality assurance
		ENTRANCES	Requirer	nents	1		D D		Processes	Documentation
		DURATION	Credits		1		R			Improvement plan
			Semester	s			5	Comp	etitive intelligence	Surveys
		PROGRAMME	Learning	g objectives	1					
			Learning	g assessment	1		<			Studies
		DEGREE	Requirer	nents				1		

Fig. 1.17 Proposed grouping of information by categories

- Category: created by the institution under its autonomy
- Dimension: association of components with features or attributes that associate them with one dimension and exclude them from another
- · Components: parts comprising each dimension
- Attributes: characteristics that determine or influence the behaviour of each dimension

Based on the structured information, the internal monitoring and tracking system is developed, consisting of three levels of interaction: the strategic, tactical and operational levels. Monitoring can be defined as a constant measurement against the established parameters for guiding actions according to the expected results, either institutionally or by unit (academic or administrative). The information structured by categories allows a defined set of indicators to be created, as in the relationship between two variables at a given time. Consequently, the indicators can be generated by the intersection of two categories, such as total floor area in m<sup>2</sup> (management category) over the total number of students (academic category).

In the shifting context faced by HEIs today, implementing a system for monitoring and evaluating the performance of the strategy constitutes an important challenge, which has been taken on by many universities in different contexts and regions. HEIs, like many other organizations, must develop performance management systems that not only measure the "correct" aspects, but they must also be effectively communicated to internal and external stakeholders. Increased competition in the higher education sector has forced HEIs to maximize their assets (both tangible and intangible) in creating and maintaining their competitive advantages, and developing and using an efficient and effective system for monitoring and evaluating the performance of their strategies is a fundamental aspect of achieving longterm success.

## 1.5.1 Comprehensive Evaluations and Balanced Scorecards

Based on the proposed model by Kaplan and Norton (1992) on comprehensive evaluation, it can be suggested that the monitoring and evaluation process should encompass multiple viewpoints of the result or an achieved goal. When discussing complexity, it is advisable that the achievement of a goal is associated with a variety of perspectives. For example, an institution whose goal is to increase the number of professors with doctoral degrees can select four perspectives and discern whether the achievement of the goal is consistent with each of the following aspects:

- Financing: the goal was achieved with the allocated resources.
- Positioning and referencing: professors with doctorates are differentiating factors in the environment in which the institution operates.
- Assessment: students consider that the teaching offered is of good quality and gives them value.

• Processes and organization: the courses offered by the institution are taught by academically qualified teachers (professional qualification and pedagogical criteria).

The concept of the balanced scorecard was designed to overcome the shortcomings of earlier systems of performance management in which measurement mainly focused on quantitative financial measurements and performance indicators. By using the balanced scorecard, HEIs seek to control their current performance and their efforts to offer activities for teaching, learning and research, improve the services offered to customers, optimize key processes, provide an environment in which the staff are motivated and improve reporting systems (Kaplan and Norton 2000). With a holistic system of strategic management, based in part on the balanced scorecard, the aim is not only to answer questions such as "Are we doing things well?" but also "Are we doing the right thing?"

Following these reflections, one fundamental activity in the development of a monitoring system, based on the balanced scorecard, involves plotting the relationships and links between key performance results in each of the various perspectives (i.e. finance, customers, internal processes, innovation, learning) related to performance indicators. These relationships should be identified and described in a transparent way to achieve a balance between the strategic plan and the balanced scorecard. The aspects of alignment and cause and effect are key for "cascading" the balanced scorecard to all levels of staff and activities.

Universities, like other organizations, are composed of seemingly disparate elements. For that reason, the linkage of cause and effect helps the interested parties, both internal and external, to comprehend the strategy as a whole, instead of focusing on its constituent parts. The links also illustrate how the individual contributions of personnel or teams should help carry the organization forward by converting its assets into the desired results and connecting the desired results with performance indicators (Kaplan and Norton 2000). Thus, evaluation is a complex process when done from multiple perspectives; thus, it is understandable that the indicators associated with the strategic level are limited in number and reflect the institution's performance in implementing its strategy.

## 1.5.2 Approach to Accountability

When it comes to evaluating the performance of the strategy, it is essential to take into account the information that the institution gives to its stakeholders. Hence, it is necessary to have an accountability system to inform stakeholders about the relationship between the objectives and the means used to reach them, as well as the interlinking of internal and external achievements, in other words, to verify that the institution stays consistent in terms of what is being said and what is being done and what is offered academically and what is awarded (Velandia 2011). There has been much controversy surrounding accountability and other closely related concepts, namely, systems for evaluating performance and university autonomy. When discussing the relationship between autonomy and accountability, as history reminds us, universities have had a hard time meeting the expectations of society in general. According to Berdahl (1990), disputes about institutional autonomy and government control date as far back as the universities themselves.

The current accountability movement sweeping across many countries is based on the perception that traditional measures of institutional performance and effectiveness, such as peer review and market positioning, are not sufficient indicators of institutional value. Therefore, despite the economic and scientific achievements attributable to higher education in recent decades, society's discontent with HEIs is still rooted in the legislative and social realms (Alexander 2000). The torrent of criticism has forced many institutions to re-examine their educational and social missions and also look for new alternatives for funding (Mora and Nugent 1998). These developments place higher demands on HEIs, since national authorities aim to control educational quality and institutional performance while at the same time insisting on greater accessibility.

Therefore, governments and HEIs must continuously review their decisionmaking processes to change key elements of their traditional systems. It is also necessary to foster a better public understanding of the mission of higher education, its values and its costs, while being constantly reminded of the social compact between higher education and society. In some contexts, this may mean that the organizational culture must change and not merely the execution as it relates to accountability in higher education. A new culture with a more entrepreneurial spirit is required to ensure that public trust is enriched and that the implementation of policies is being effectively advanced as part of the stewardship responsibilities of policy makers. There is a need to reduce, if not eliminate, the traditional model of isolated or self-serving entities and to move increasingly towards utilizing crossfunctional teams and partnerships.

In terms of stakeholders, they should focus on becoming an integrated solutions organization rather than a self-centred control agency (Leveille 2006). In this respect, instituting a flexible and transparent system for everyone involved depends on vision, the ability to change and the commitment to move forward. Thus, from the perspective of higher education, internally and externally, these institutions must focus on implementing mechanisms that provide transparent information about their performance in the various perspectives mentioned.

## 1.6 Discussion and Considerations

The proposed conceptual framework posits that effective planning consists of creating a culture of strategic planning, reinforced by continuous evaluation. There, the results associated with strategic planning efforts are more likely to be achieved when considered essential to the work of structural units and not as dissociated tasks. Consequently, the leaders of HEIs can maintain their vital strategic plans by promoting and evaluating their individual contributions, connecting the performance evaluation of the specific units with relevant and applicable institutional strategic plans. With that in mind, how is this conceptual framework different and what does it contribute to the practice of strategy making in higher education?

It could be suggested that on the one hand, one significant contribution is to help identify the issues and trends for strategic management in the countries of specific regions, such as the Ibero-American higher education systems; on the other, it may provide a platform for exchanging knowledge and reflections about the shared current and future challenges faced by HEIs in their quest for effective strategic management. Given that, the practical contribution is to provide a reference for considering the stages that prove critical and essential when it comes to thinking, doing, supporting and learning from the process of formulating and implementing the institutional strategy in different contextual realities.

Therefore, based on considerations raised in relation to the proposed conceptual framework and building from the analysis of the documents of the institutions involved in this study in 14 countries in the Ibero-American region, the aim of this study was to highlight and develop some key attributes and areas for improvement to facilitate and help ensure the impact of strategic university management in different national contexts. These attributes are set out and discussed below.

Governance, decision-making systems and university autonomy: Institutions have shared social responsibilities, so their success or failure has collective implications. This means that if an institution is reinforced and sustainable, it nurtures the system and society. However, if the opposite occurs, this provides incentives for intervention and the limitation of institutional autonomy. These three concepts are intrinsically linked and directly influence strategic practice. If we examine the concept of university autonomy in the institutional frameworks of universities, we can see a widespread concern to involve all stakeholders in the education sector in a more in-depth discussion on the autonomy of universities.

This is aimed at improving the quality of higher education systems, since without autonomy it is nearly impossible to conceive a real system of institutional strategic management. As stated in the European University Association (EUA) report (Estermann et al. 2011), having a greater degree of autonomy (organizational, financial, personnel management) does not necessarily entail a lack of regulations, but it is essential for competing in a globalized world; likewise, it must be accompanied by a favourable regulatory framework and adequate financing that promotes full autonomy, along with complete transparency and accountability to society. Meanwhile, in many countries of the Ibero-American region, the conception of governance remains obscure and remote. In other words, there have been no major departures from the current models, such as would, for instance, involve streamlining the degrees offered or implementing paradigm shifts in funding models. Instead, they adhere to the status quo; rather than promoting innovation through competitive advantage and differentiation, they are still inclined to the agreed non-differentiation, which entails business as usual with no major paradigm shifts.

Decision-making systems are closely linked to the concepts of autonomy and governance systems. Therefore, the challenge is to design planning processes framed and explicitly linked with the institution's decision-making systems. It is not enough for the plans to be technically formulated if they are not appropriate for the people making decision at various levels. In this case the process may fail, which underscores the need to promote and achieve an effective linkage with the institutional architecture, because otherwise the strategic plan and strategy will amount to a mere simulation exercise and not a real strategic tool.

Interlinking of the strategy, budget and funding sources (classic and complementary) The idea of making optimum and efficient use of resources and organizational capabilities in any strategic planning process should consider the budget as a vital factor, namely, the triad of budget, resources and strategy. This is vital for any strategic undertaking. It is also related to the previous point regarding autonomy and governance, which in some way will impose the optimal combination of funding mechanisms that will ensure capital adequacy associated with internal and external efficiency. Nevertheless, it is necessary to consider what strategies can be implemented that go beyond traditional sources of funding, while taking into account that the current economic environment poses considerable constraints. These strategies are linked to the trend towards professionalized management as well as managerialism, two phenomena that have not been exempt from criticism and controversy. Meanwhile, in many Latin American countries, where public HEIs remain dependent on traditional but increasingly more limited sources of funding, there does not appear to be any real discussion of complementary short-term alternatives; however, these will certainly demand substantial cultural changes and paradigm shifts.

*Clear and attainable methodologies (thinking, doing, supporting and learning)* Strategic management should be a point of convergence, not conflict; in other words, it should be based on a variety of methodological models that are clear, comprehensible and attainable. Success is not about its complexity but rather its sophistication and clarity.

*Reporting, communication and accountability are crucial elements* Information is essential in strategic management processes, since their credibility is earned by making decisions objectively and with total transparency for the community. It is vital to consider how to ensure the accountability and transparency of the process.

Leadership skills and competencies related to the professionalization of management It has been suggested that one key aspect of successful strategy implementation is associated with the achievement of increased participation in the process, as well as a shared vision of the defined strategy. With that in mind, we could suggest that achieving an efficient combination of leadership and managerial competencies constitutes a differentiating factor in the process of aligning corporate and functional strategy.

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# Chapter 2 Trends in Latin American Higher Education Systems

#### Luis Eduardo González, Oscar Espinoza, and Jasmina Berbegal Mirabent

**Abstract** This article explores and analyses the Latin American regional higher education systems, presenting and discussing evidences that Latin American higher education institutions (HEIs) share points in common regarding their strategic management systems. Different factors are identified and presented as relevant aspects that should be taken into consideration by representatives of HEIs in their future strategic decisions. The main issues discussed and put forward as key aspects within the institutional realm were associated with the increased enrolment and gross enrolment rate, the changing profile of faculty members, the privatisation and its scope, the inequities in access, persistence and employability and changes in the funding system and in the role of the State.

**Keywords** Higher education systems • Higher education funding • Decisionmaking • Higher education policies

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## 2.1 Introduction<sup>1</sup>

This chapter provides an overview of the development of higher education in Latin America and the Caribbean in order to better understand the changes observed in the institutional strategic management setting.

The definitions regarding education systems in Latin America and the Caribbean vary amongst countries, thus making it difficult to obtain homogeneous and comparable data. In this context, some countries' tertiary reporting systems only serve the university sector, while in other countries, university and nonuniversity education systems are included.<sup>2</sup>

A close examination of Latin American regional higher education systems reveals that, in recent decades, some elements that in the past tended to differ between countries are now converging into similar approaches. This applies not only at the system level, but also at the institutional one, providing some evidence that Latin American higher education institutions (HEIs) share points in common regarding their strategic management. From this perspective, six main factors are identified. These factors are (a) increased enrolment and gross enrolment rate; (b) a changing profile of faculty members; (c) privatisation and its scope; (d) inequities in access, persistence and employability; (e) changes in the funding system; and (f) changes in the role of the State. These topics are discussed in the following sections in order to be considered in future strategic decisions of HEIs.

# 2.2 New Trends Characterising the Development of Higher Education Systems in Latin America

## 2.2.1 Increased Enrolment and Gross Enrolment Rate

Higher education in Latin America has not followed the European Humboldtian model<sup>3</sup> that unifies teaching with research; instead, it emphasises teaching. For this reason, variation in enrolment rates is an important indicator to focus on.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup>Part of the background information gathered for this paper was shared by the authors in the presentation "Lecciones Aprendidas sobre Políticas Universitarias: La Experiencia en América Latina" as part of the 3rd International Forum on University Innovation, under the theme of "Avances en la innovación universitaria: Tejiendo el Compromiso de las Universidades." Bilbao, University of Deusto, July 6–8, 2011

<sup>&</sup>lt;sup>2</sup>This situation is apparent when examining the number of institutions reported by a country, namely: in Argentina which has 115 universities and 2,092 nonuniversity organisations, while Brazil reports 186 universities and 2,128 nonuniversity entities. A contrasting case is that of Mexico, which has 2,573 universities and 19 nonuniversity institutions (see Table 2.3).

<sup>&</sup>lt;sup>3</sup>According to the CINDA report (2011a, b), only 62 out of 16,000 HEIs can be considered research institutions, following the Humboldtian model.

<sup>&</sup>lt;sup>4</sup>If we apply the criteria of the Atlas of Science from 2006, which includes institutions that have registered over 2,000 ISI publications in the last 5 years, we observe that the ratio of research organisations relative to the total number of universities is 8.0 % in Argentina, 3.6 % in Brazil,



**Fig. 2.1** Trend for higher education enrolment in Latin America (1970–2008). Reported data for Costa Rica and Nicaragua (Table 2.1 and Fig. 2.1) was from year 2010 (the closest year with available data) (*Source*: CINDA (2007) (C.1.3) and update from the authors based on selected national reports (CINDA 2011a, b)

As seen in Fig. 2.1, countries comprising the Latin American and the Caribbean higher education systems have experienced a substantial growth in enrolments. In some of these countries, such as Brazil or Chile, enrolment has doubled over the last decade. Therefore, expansion of Latin American higher education systems during the last four decades has been exponential. Indeed, while in 1970 almost 1.57 million students were enrolled, in 2000 there were 10.86 million students. Nevertheless, the increase has been particularly pronounced since 2000. Particularly, over the last decade, enrolment has grown by 66 %, reaching over 18 million total students in 2008 – a tenfold increase in 40 years (see Fig. 2.1 and Table 2.1).

This growth stands in stark contrast with the world average rate which has only tripled from 1970 (from 9 to 26 %) (UNESCO 2010). All these figures suggest that higher education in Latin America has increased more than ten times the world enrolment at this educational level (see Table 2.1).

Besides this strong performance, this table also shows the very different sizes of Latin American higher education systems, ranging from small ones with less than 150 thousand students (e.g. El Salvador, Nicaragua, Panama and Paraguay) to large university systems with more than two million students (e.g. Argentina, Brazil and Mexico).

Changes in enrolment rates reflect variations not only in the number of students, but also in the size of the population of Latin American countries. Several factors have driven this rapid growth. First, the growth of the young population with completed secondary education and greater socioeconomic potential has created an increased demand for higher education, leading to higher postsecondary enrolment.

<sup>4.7 %</sup> in Chile, 0.3 % in Mexico and 8.2 % in Venezuela. See CINDA (2007, p. 84) based on SCImago Research Group (2006) Atlas of Science 2006.

	U		5	,	
Country	1970	1980	1990	2000	2008
Argentina	298,389	481,746	915,817	1,724,397	2,208,000
Bolivia	35,250	60,900	122,993	278,530	353,000
Brazil	430,473	1,377,286	1,566,451	2,694,245	5,958,000
Chile	78,430	145,947	249,482	452,177	753,000
Colombia	85,560	271,630	487,448	934,085	1,487,000
Costa Rica <sup>a</sup>	15,473	55,593	74,270	141,629	149,168
Ecuador	38,692	171,276	173,481	263,902	535,000
El Salvador	9,515	48,227	88,118	115,239	139,000
Guatemala	15,609	50,890	92,044	158,646	234,000
Honduras	9,000	22,310	43,117	87,886	148,000
Mexico	271,275	935,789	1,252,027	2,047,895	2,623,000
Nicaragua <sup>a</sup>	9,385	35,268	39,750	85,113	122,111
Panama	8,947	40,369	52,510	116,887	133,000
Paraguay	8,172	26,915	28,906	82,265	181,000
Peru	126,234	306,353	564,294	775,248	952,000
Uruguay	30,000	36,298	71,548	93,744	159,000
Venezuela	100,767	307,133	513,458	803,980	2,109,000
Total	1,571,171	4,373,930	6,335,714	10,855,868	18,121,168

 Table 2.1
 Trend for higher education enrolment by country (1970–2008)

*Source*: CINDA (2007) (C.1.3) and update from the authors based on selected national reports (CINDA 2011a, b)

<sup>a</sup>Reported data for Costa Rica and Nicaragua was from year 2010

Second, the diversification of both the public and especially the private offering, as well as the establishment of regional offices in rural areas, has facilitated the access to higher education. Also, several incentives have been promoted by governments in order for students to have equal access to tertiary education.

Last, but not least, in Latin America and the Caribbean, there have been measures to explicitly promote increased enrolment and coverage at the tertiary level in response to social pressure to raise the level of schooling. These initiatives are accompanied by a social belief that access to this educational level is linked to higher status. Additionally, the level of schooling creates differentiation in the private rate of return, which stimulates and strengthens the demand for postsecondary education. All of this goes along with the higher value that society places on knowledge. As a result, the proliferation of the demand for accessing this educational level has drastically increased.

When considering the current trend of enrolment rates, a sustained growth is also observed with an average rate of 20 % for the period 2005–2008. This positive trend particularly holds for countries such as Chile (an increase of 22 %), Uruguay (44 %) and Colombia (30 %) (see Table 2.1). This strong performance can be explained for several reasons: the implementation of public policies to promote access to higher education, an increase in the young population with secondary schooling, an increase in the prestige of schooling, greater relevance of knowledge for achieving

Table 2.2Higher educationgross enrolment rate in LatinAmerica, age group: 18–24(1999–2008)

Country	1999 (%)	2008 (%)
Argentina	NA	69
Bolivia	NA	38
Brazil	14	34
Chile	38	52
Colombia	23	35
Costa Rica	16	NA
Ecuador	NA	42
El Salvador	22	25
Mexico	18	27
Panama	41	45
Paraguay	13	29
Peru	NA	34
Uruguay	34	64
Venezuela	28	79

*Source*: UNESCO (2010) *NA* not available

better employment, greater private rate of return that higher education studies generate and the growth of the private sector.

However, there are countries with little or no variation. This is the case for Bolivia (2.7 %), Honduras (6.4 %) and Nicaragua (8.6 %). It is also important to highlight the negative trend faced by Costa Rica, Guatemala and Panama with a decline in enrolment close to 9 % (Table 2.1). Although this panorama is complex, it is possible to hypothesise that those countries are smaller than the others, and perhaps people with the capacity to self-finance private higher education are already incorporated into the system. Furthermore, data is not reliable enough.<sup>5</sup>

One of the main consequences of this exponential growth in the number of university students is the greater gross enrolment rate of tertiary education in Latin America. Indeed, if we consider the group of people aged between 18 and 24, we note that in 10 years, the percentage enrolled in university studies has increased substantially in all countries across the region as shown in Table 2.2, with an average value of 25 % in 1999 and 44 % in 2008.

The aforementioned growth of enrolled students is complemented by the mass incorporation of female students in tertiary education in recent decades. In aggregate terms, we observe that the number of women enrolled in higher education has increased almost twice as fast as that of men. This is a typical trend in developed countries.

One of the main consequences of this growth is that currently participation of women slightly exceeds that of males in the postsecondary system in Latin America. Moreover, not only do women in Latin America enrol in large numbers, they also

<sup>&</sup>lt;sup>5</sup>For instance, in some countries such as Costa Rica, the private sector is not forced to provide data to the government.

perform better than their male counterparts and graduate at higher rates. Countries such as Bolivia, Chile and Colombia are the exception where male students still outpace the number of female students attending higher education.

Nevertheless, access for women varies according to areas of knowledge with higher concentrations in disciplines related to social sciences, management, education and services. On the other hand, males have a higher relative share in the areas of science and engineering and manufacturing and construction. Income inequality does not translate into gender differences in higher education enrolment.

# 2.2.2 Changing Profile of Faculty Members

The increased coverage and enrolment in Latin American higher education are closely associated with a growth in the number of faculty members. According to CINDA (2011a, b), the number of faculty members is directly proportional to the size of the higher education systems of each country. The larger the system (in number of enrolments), the greater the teaching staff mass. Thus, in countries such as Brazil and Mexico, large academic bodies account for 400 thousand and 300 thousand professionals, respectively. Considering the 11 countries of the region under study, the number of faculty members (part and full time) is about 1,200,000. This involves processes of recruitment, hiring and training but also the design and implementation of an internal evaluative procedure to assess their performance.

The rise in the number of faculty members has also impacted the profile of these professionals. Until a few decades ago, the academic scholar was an expert in his/ her field, working full time at the university and conducting both teaching and research activities. Currently, most faculty members are only employed on a part-time basis. For instance, in Argentina, only 14 % of professors at public universities work full time, 21 % work part time (24 h/week) and the remaining 65 % do so on an hourly basis (12 h/week).

This trend suggests that faculty members are primarily dedicated to teaching tasks, and that these activities are simultaneously performed with the exercise of their professional duties. Moreover, professionals working part-time at universities are doing so in several institutions at the same time, offering courses under a regime of annual recruitment. This type of teaching staff is not as committed to the institution or with its students as a full professor would be. Clearly, this profile is in detriment to a science-based one, oriented both to teaching and research tasks. As a result, the main focus of Latin American institutions resides in instruction, while research activities are clearly left behind.

Resulting from distance education, new technologies are also carving a new teacher profile, characterised by professionals who work without preset schedules, and instead of going to the university, they work online through remote communication. This system requires virtual relationships with the students as well as being available and connected 24/7. This suggests that professors are asked to succeed in disseminating and transferring knowledge using platforms, e-learning and virtual

communities, signalling that pedagogical processes should also be modified and adapted to this new reality.

Insufficient qualifications of teaching staff are another concern. Few university professors in the region possess a master's degree or hold a PhD. Brazil is perhaps one of the countries with the higher proportion of doctors in the academic profession. In other countries, staff holding a doctorate usually represents less than 15 %. Also, it is observed that private institutions previously had fewer full-time faculty and/or qualified teachers with postgraduate training than public ones. Nevertheless, there is external pressure from governmental bodies to professionalise the academic career. Precisely, one of the objectives in Argentina, Mexico and Colombia, amongst other Latin American countries, is that the recruitment process for accessing the higher education system includes the requirement of holding a PhD.

Social demands, globalisation and new technologies are also shaping the profile of the future professor. Enterprises are increasingly demanding higher and better trained professionals in order to effectively cope with the challenges companies are facing. Being creative, entrepreneurial and innovative are skills highly demanded by the marketplace. Likewise, being able to manage information from different sources and apply to different contexts is highly valued. These skills, however, require new trainings. In this respect, the reproduction of content and sole reliance on classroom instruction are still widespread practices at Latin American universities. Nevertheless, universities are now starting to adopt pedagogical models that involve student participation in a "learning by doing" approach. Teaching awards and other similar initiatives have been introduced in order to encourage excellence in teaching and research.

Regarding technological and scientific advances, teaching staff should also be up-to-date with state-of-the-art techniques in their field of expertise. International networks and an active attitude towards cutting-edge discoveries are crucial. In this sense, mobility support mechanisms are crucial in order to improve the quality of education. However, only a few universities have developed policies that facilitate exchange programmes and have created the facilities needed to send and receive faculty from abroad (such as residences for visiting scholars). The lack of financial resources remains one of the main constraints for this process of internationalisation to take place. In sum, the introduction of new teaching methods implies important challenges and changes in conceptualising the role of university lecturers, their educational profiles and the contextual preparation of the teaching material.

## 2.2.3 Privatisation and Its Scope

As previously discussed, in recent decades there has been an impressive growth in enrolments. Latin American countries have approached the expansion of higher education in mainly two different ways. On the one hand, we find countries such as Argentina, Mexico, Uruguay or Venezuela where public universities have expanded and diversified, and new public institutions have been created at the regional level to

absorb part of these new demands. Stated differently, the strategy followed by the aforementioned countries consists of adding more vacancies in public entities, which allowed the mass entry of graduates from secondary education into free and non-selective tertiary education.

One of the main implications resulting from the implementation of this policy is the creation of extremely large universities in the region. Some examples include the University of Buenos Aires (Argentina), the University of Santo Domingo (Dominican Republic) or the National Autonomous University of Mexico and the Metropolitan Autonomous University (both in Mexico).<sup>6</sup> This strategy is based on the conception that higher education is a right that the national government should guarantee to all citizens.

On the other hand, in countries such as Brazil, Chile, Colombia and Paraguay, public education has remained restricted, and private institutions have faced the rising demand for advanced learning opportunities. In these countries, governments have deregulated the market for higher education. As a result, by increasing its enrolment rate and visibility, private universities have brought an end to what had been a public sector monopoly, and currently they account for more than 40 % of the higher education enrolment.

Private HEIs in Latin America are self-financed and are allowed to establish, within a minimum general framework, the admission requirements they consider appropriate. The functioning of these institutions is regulated by the logic of the free market and the principle that higher education is a tradable commodity. This model is based on the idea that higher education has a high private rate of return; therefore, it is assumed that each individual can invest in their education which will translate into a substantial amount of income in their professional career.

Notably, the private postsecondary offerings are heterogeneous and range from institutions of excellence, which usually recruit an elite group of students and are expensive, to those of lesser quality that cater to meet the demand of students from medium and low socioeconomic levels.

Data on educational opportunities confirm the two aforementioned strategies (private and public institutions) that Latin American countries have implemented in order to satisfy this growing demand for tertiary education. Table 2.3 summarises this information, reflecting the number and variety of HEIs entities that have been created in recent decades, particularly in the private sector. In fact, in the 1940s there were only 14 private universities in the region, whereas today there are about 2,546 private universities and 2,923 nonuniversity private institutions. Altogether, the Latin American tertiary education system includes more than 11,000 institutions (González 1998; CINDA 2011a, b).<sup>7</sup>

With regard to enrolment, the private sector has played an important role in the provision of tertiary education in Latin America. The proportion of students

<sup>&</sup>lt;sup>6</sup>See: *Red de Macro Universidades Públicas en América Latina y el Caribe* at http://www.redmacro.unam.mx.index.html

<sup>&</sup>lt;sup>7</sup>For some countries, postsecondary education includes university and nonuniversity institutions. Therefore, data is not comparable, as each country has its own definition.

	Universities		Nonunivers		
Country	Public	Private	Public	Private	Total
Argentina	55	60	917	1,175	2,207
Bolivia	17	68	468	1,490	2,043
Brazil	100	86	2,092		2,278
Chile	16	44	0	117	177
Colombia	79		203		282
Costa Rica	5	51	6	18	80
Ecuador	22	38	7	3	70
Mexico	872	1,701	127		2,700
Panamá	5	51	39		95
Paraguay	15	72	48	118	
Peru	35	65	1,120		1,220
Uruguay	1	14	11	2	28
Venezuela	75	95	112		282
Total	1,299	2,546	5,040	2,923	11,810

 Table 2.3 Number of HEIs, both public and private (2010)

*Source*: CINDA (2011a, b). Data from Colombia were gathered from Velandia et al. (2009), where 81 HEIs are public and 201 private



**Fig. 2.2** Enrolment in public and private institutions of higher education in Latin America (*Source*: Rama (2007). Data after 2005 are estimations)

attending private HEIs has more than doubled over the last 15 years. Thus, it is not surprising to see the rapid growth experienced by these institutions, whose enrolment figures are now ahead of state universities (see Fig. 2.2). This trend is largely due to the privatisation process driven by certain governments in the region beginning in the 1980s.

Concerning private enrolment relative to total enrolment in higher education, Table 2.4 corroborates that some Latin American countries account for a large Table 2.4Private enrolmentrelative to the total enrolmentin higher education in LatinAmerica (2004–2009)

Country	2004 (%)	2009 (%)
Argentina	21	26
Bolivia	16	20
Brazil	72	72
Chile	74	77
Colombia	56	45
Costa Rica	55	NA
Ecuador	55	35
El Salvador	NA	66
Mexico	33	33
Panama	29	28
Paraguay	NA	63
Peru	45	54
Uruguay	10	11
Venezuela	42	28

*Source*: CINDA (2007, 2011a, b) *NA* not available

proportion of private enrolment. This is the case for Chile and Brazil, where over 70% of total enrolments correspond to private institutions. At the opposite extreme, we find countries such as Argentina, Bolivia, Panama, Uruguay and Venezuela, where enrolment in private HEIs is below 30%. El Salvador, Paraguay and Peru are placed in an intermediate position (about 50% of total enrolment).

Despite the growing demand for tertiary education and diversification, universities account for less than one-third of the postsecondary educational opportunities in Latin America. Indeed, the growth in the private offering has been accompanied by an increase in the number of nonuniversity tertiary institutions, that is, institutions comprising teacher colleges, technical schools and postsecondary vocational training facilities, which generally offer programmes of a shorter duration compared to those of universities. Nevertheless, it is important to point out that this situation is not applicable to all countries. In fact, in countries such as Argentina, nonuniversity postsecondary education is not considered higher education, as significant differences exist between tertiary and postsecondary education.

While the increasing number of private colleges helped meet the swelling demand for higher education at no or very little cost to governments, private provision of higher education has also given rise to the question of whether privatisation can be used as a tool for improving the quality and relevance of Latin American HEIs, as well as for increasing access to disadvantaged students.

Differences amongst institutions have grown remarkably across Latin American countries. While positive in most respects, the main challenge ahead is that each university follows its own scheme, with different ownership schemes, funding and programmes that have contributed to a somewhat disjointed and fragmented system, made up of institutions that are only weakly linked (Holm-Nielsen et al. 2005).

Policies promoting the growth of the private sector in Latin America had strong support in the so-called Washington Consensus (with a neoliberal nature) and based

on the logic of the market (Williamson 1990). The recommendations made in these approaches had great influence on international cooperation processes as well as on the decisions of Latin American governments of that time, the impact of which is still visible although the results were not the expected ones.

The ten recommendations of the Washington Consensus were fiscal discipline, reordering public expenditure priorities, tax reform, liberalisation of interest rates, a competitive exchange rate, liberalisation of international trade ("trade liberalisation"), liberalisation of the inflow of foreign direct investment, privatisation of state institutions, deregulation and property rights. These principles affected the economies of Latin American countries and impacted, amongst other social sectors, the higher education system. The observable results were a reduction of the public expenditure on tertiary education as a share of GDP, an increased private investment in the system, the reduction of the direct fiscal contribution to public universities, the implementation of self-financing schemes and even a gradual increase in duties (Espinoza 2002).

## 2.2.4 Inequities in Access, Dropout and Employability

Education is a fundamental right, and as a result, all people should benefit from education and no section of society should be segregated from the rest of society. Human beings are born with individual differences and potential. Nonetheless, it is assumed that those inequities generated by society (i.e. socioeconomic, cultural, ethnic, political, gender-based) are inadmissible for equity in education. When the term "equity" is used in the higher education context, it refers to creating opportunities for equal access and success amongst historically underrepresented student populations. This term encompasses not only equity of access, but also survival, academic performance and employability (equity of results) (Espinoza 2002, 2007).

The large increase in the number of students enrolled in tertiary education has facilitated access to higher education for those students from the most vulnerable social and economic groups. However, as stated above, this phenomenon has not been adequately addressed by HEIs, resulting in high failure and dropout rates and further difficulties when searching for first employment after graduation.

In Latin American countries, inequity is rooted in the socioeconomic conditions of each person from birth and is gradually accentuated as the individual progresses through the educational system. According to De Wit et al. (2005), regressive patterns in higher education might stem from inequities in basic education. Following this reasoning, on the one hand, we have students whose families can afford to pay for high-quality primary and secondary education and thus be better trained for university entrance exams. On the contrary, students from low-income families are left with fewer choices. Figure 2.3 illustrates this situation for the Chilean educational system. We observe that about one in every 10 children entering first grade have access to one of the country's 25 public universities, a figure that could be tripled if we also consider enrolment in private institutions.



**Fig. 2.3** Evolution in the number of students that entered first grade in 1995 and their entry into higher education in Chile in 2007 (in thousands of people) (*Source*: Latorre et al. 2009)

Although different initiatives have been successfully implemented and progress has been made in raising social awareness on this matter, most higher education systems have not met their aspirations for equitable outcomes, and there is still a challenge when it comes to gaining support from institutional leaders and policy-makers. Therefore, new governmental intervention programmes and initiatives should be enhanced in order to counterbalance these inequities. Such interventions might lead to equity and thus the development of people's capabilities and intelligence (Latorre et al. 2009). In this sense, there is consensus that equity in higher education must be addressed in a more comprehensive manner. Particularly, five important requirements necessary for accomplishment are assumed (CINDA 2010; Espinoza 2002, 2007; Espinoza et al. 2009):

- Resources: having the necessary financial, social and cultural resources that allow people to study as long as required based on the premise that learning takes place in an ongoing process that perseveres throughout one's life.
- Access: access to a quality higher education, regardless of gender, ethnicity or socioeconomic origin.
- Survival: requires the proper internal conditions to foster learning in order to advance in the chosen course of study within a similar time frame to the theoretical duration established in the curriculum.
- Achievements: attaining academic achievements expressed in appraisals that reflect satisfactory learning.
- Results: achieving similar results in terms of labour market entry, social participation and political power. This means that graduates from different institutions should not only recover their investment in higher education but should also have the same opportunities to enter the job market and obtain attractive and decent-paying jobs.

Table 2.5	Higher education
gross enro	lment ratio in Latin
America b	y income quintile
(2009)	

	Quintile 1	Quintile 5
Countries	(poorest) (%)	(richest) (%)
Argentina	19.0	59.0
Bolivia	3.1	54.0
Brazil	2.7	52.0
Chile	19.8	79.0
Colombia	8.5	89.0
Costa Rica	7.2	85.0
Ecuador	27.2	61.0
El Salvador	14.3	52.0
Mexico	5.0	42.0
Panama	18.9	53.0
Paraguay	10.8	55.0
Peru	2.3	42.0
Uruguay	2.2	45.0
Venezuela	15.6	20.0

Source: CINDA (2011a, b)

#### 2.2.4.1 Equity in Access

The distribution of opportunities for accessing higher education is strongly influenced by the socioeconomic background of students. Based on the records presented in Table 2.5, the highest gap between the richest and the poorest group is found in Colombia followed by Costa Rica. In these two countries, students from the richest 20 % of the population make up more than 80 % of enrolled students, whereas the poorest 20 % make up just 8.5 % and 7.2 % of the student body, respectively. Countries such as Chile, Bolivia, Brazil, Paraguay, Uruguay or Argentina fare somewhat better, but access to higher education remains highly unequal. In aggregate terms, the least prosperous 20 % of the population of these countries account for only 9.6 % of enrolment in higher education. Venezuela displays better performing rates with similar access (15.6 % from the poorest quintile and 20 % from richest quintile).

This situation reflects the social structure of Latin American countries where, in aggregate terms, 45 % more young people belonging to the highest income quintile enter higher education with respect to those in the lowest quintile, which are clearly excluded. These figures provide evidence that while inclusion policies have led to increased enrolment in all socioeconomic sectors, they have failed at reducing the existing imbalances in access to higher education.

These figures provide evidence that the expansion of higher education in Latin America has paved the way for better access to advanced training. Nevertheless these inclusive policies have led to increased enrolment not only from low-income families and less privileged groups but also from all socioeconomic groups already overrepresented in the system. The end result appears to be a distribution of students that is very much the same as before the expansion. Consequently, existing
imbalances in access to higher education have remained the same, which means that the majority of students are coming from the wealthier segments of society (Holm-Nielsen et al. 2005).

An effective response to income inequities would be targeting financial aid. Nevertheless, this aid in Latin America is scarce and the availability of scholarships low. Moreover, it is not always targeted to students from low-income families, as in some countries the likelihood of receiving a scholarship rises with the level of income. Also, previous experience has shown that a financial aid system based on loans is not the optimal solution, as poor families tend to be unable to provide collateral and are generally reluctant to put themselves in debt (Schwartzman 2002). In sum, expanding access to higher education for students with financial needs but excellent academic records is still a challenge that hampers Latin American HEIs.

#### 2.2.4.2 Equity in Academic Survival

Inequity is also manifest in the survival of young people in the postsecondary system. From this perspective, we can see that on average less than 50 % of young people who began undergraduate studies in Latin America actually finished them,<sup>8</sup> with the exception of countries such as Panama or Paraguay where, according to available data, they have the highest graduation rates in the region (Fig. 2.4).

We also note that only 10 % of students complete their undergraduate coursework in the term established by their study programme (CINDA 2006). This implies



**Fig. 2.4** Graduation attainment efficiency at Latin American universities: 5-year average, based on latest data available (*Source*: Adapted from CINDA (2011a, b)

<sup>&</sup>lt;sup>8</sup>Graduation efficiency is defined as the rate of students that having started their academic studies finished it and obtained the degree. The model used for measuring the dropout rate considers those students who have completed their studies within the prescribed minimum length plus four additional years.



Fig. 2.5 Graduation rates in Latin American universities (2010) (*Source*: Adapted from CINDA (2011a, b) national reports)

that there is an excessive prolongation at the end of undergraduate studies, a phenomenon that could be explained by the existence of a high repetition rate.

When comparing the behaviour of public and private institutions in the region, differences in terms of graduation rates are observed. In Brazil and Venezuela graduation rates are clearly higher at private institutions. On the contrary, this tendency reverses in Chile, where public universities show better performance rates in terms of graduates than their private counterparts. In countries such as Colombia and Uruguay, graduation rates are quite similar amongst private and public HEIs (see Fig. 2.5).

To a great extent, the diversities and asymmetries that characterise Latin American society help explain the poor results obtained until now in terms of graduation rates. Undoubtedly, these results reveal that few institutional policies have been set up in order to reverse this trend. While there are no data to confirm that the dropout rate is directly correlated with economic-vulnerable students, it is suggested that the highest returns of higher education are recorded for low-income families representing a long-term investment that not all families can afford.

#### 2.2.4.3 Equity in Employability

The gradual rise in the number of higher education graduates in the region has created a stronger competition for employment. This trend is particularly noticeable in countries such as Brazil and Argentina, where the proportion of highly educated people amongst the pool of unemployed workers rose from 1.9% and 3.0% in 1990 to 5.0% and 6.4% in 2009, respectively (see Table 2.6). Colombia, Chile and Paraguay show a similar tendency. This difficulty when entering the job market for individuals with a higher level of schooling is more apparent amongst young people from lower-income families, since they have fewer social networks that facilitate

Table 2.6         Variation of open	Country	1990	2009
unemployment <sup>a</sup> of the	Argentina	3.0	6.4
population with higher	Bolivia	8.0	NA
education in Latin America,	Brazil	1.9	5.0
1990 and 2009 (as a	Chile	6.1	8.4
percentage)	Colombia	7.3	11.5
	Costa Rica	2.8	3.0
	Ecuador	6.0	8.4
	El Salvador	NA	6.4
	Guatemala	2.0	NA
	Honduras	6.2	NA
	Mexico	2.2	NA
	Panama	15.2	6.4
	Paraguay	3.8	7.0
	Peru	NA	5.1
	Dominican Republic	NA	5.8
	Uruguay	6.0	4.2
	Venezuela	6.0	NA

Source: CINDA (2011a, b)

NA not available

<sup>a</sup>Open unemployment is the number of people within the labour force who are unemployed or looking for a job or available to immediately work (OIT 1982)

access to employment. On the other hand, we observe two countries, namely, Panama and Uruguay, which reported a substantial decline in the unemployment rate amongst the population with higher education.

The increase in the supply of skilled workforce generates higher levels of competitiveness between job seekers, and in many cases, this leads to underemployment. Another factor that may also play a role is an increased demand for unskilled workforce in some sectors of the economy. However, this demand would be contributing to hiring skilled workers, thereby generating underemployment.

Despite the increased unemployed rate of people with higher education, based on the numbers presented in Table 2.7, for almost every country in the region, the unemployment rate of higher-educated professionals is less than that of individuals with lower levels of schooling (both primary and secondary). This stands as a key finding revealing that policies implemented by Latin American countries to offer broader access to higher education do not necessarily lead to unemployment.

From the above, the increased social value placed on education could impact the interest of individuals in pursuing tertiary education. An effective way for adjusting curricula and programmes to meet the needs of society includes the establishment of labour market "observatories" that monitor and analyse the occupational performance of university graduates. Unfortunately, few data are available and few governments or institutions collect such information on a regular basis.

		Unemployme percentage of	nt by educational total unemployme	level, as a ent
Country	Total unemployment as a percentage of the total workforce	Percentage primary education	Percentage secondary education	Percentage higher education
Argentina	7.8	48.1	36.7	15.3
Bolivia	NA	NA	NA	NA
Brazil	8.4	51.6	33.6	3.6
Chile	7.8	17.8	58.5	23.5
Colombia	10.3	76.6	27.3	20.6
Costa Rica	4.6	65.2	52.4	6.4
Ecuador	7.7	74.0	57.5	23.6
El Salvador	NA	NA	NA	NA
Honduras	3.4	50.7	39.6	22.9
Mexico	5.3	72.8	37.7	18.0
Nicaragua	6.8	36.0	15.4	24.0
Panama	NA	NA	NA	NA
Peru	5.6	49.9	27.0	9.9
Paraguay	6.7	30.0	38.0	37.6
Dominican Republic	15.6	35.0	23.6	16.4
Uruguay	9.2	59.1	NA	13.8
Venezuela	NA	NA	NA	NA

 Table 2.7
 Average rate of unemployment in the workforce in 2007, by educational level (as a percentage)

*Source*: Based on World Bank, World Development Indicators (2011) *NA* not available

## 2.2.5 Changes in the Funding System

Traditionally, the State is responsible for financing higher education and particularly by assigning the funding allocated to public universities. The significant increases in the demand and the successive economic crises that have struck both Latin American and European countries have led governments to restrict this delivery of funds. This phenomenon has triggered an increase in the private offering in order to meet the requirements of the sector.

If we compare the allocation of resources in higher education compared to other levels of education, we observe heterogeneous behaviour amongst Latin American countries, which, in most cases, is around 20 % of the total public spending on education. The countries with the lowest proportion of expenditure on higher education relative to total expenditure in the educational sector are El Salvador, Chile and Peru, while in Venezuela it exceeds 40 % of the total expenditure (see Table 2.8).

Although the landscape is still quite diverse, the tendency to bring private funding to higher education is also noted in fiscal policies promoted in recent decades. Yet, Latin American countries invest close to what is expected based on their level of per

Countries	2005	2006	2007	2008
Argentina	NA	17.8	17.7	17.7
Bolivia	NA	24.2	NA	NA
Brazil	19.0	16.7	16.2	15.9
Chile	14.0	14.8	15.3	14.5
Colombia	13.8	14.6	NA	22.0
Costa Rica	NA	NA	NA	21.7
Ecuador	NA	NA	NA	NA
El Salvador	11.1	9.7	9.8	NA
Mexico	17.5	17.2	18.5	NA
Panama	NA	NA	NA	22.4
Paraguay	NA	NA	19.1	NA
Peru	10.7	14.4	13.6	15.7
Uruguay	21.8	22.0	NA	NA
Venezuela	NA	47.3	43.5	NA
Average	15.4	19.9	19.2	18.6

 Table 2.8
 Spending on higher education as a percentage of total expenditure on education (2005–2008)

Source: World Bank (2011)

NA not available

capita income. Indeed, countries such as Chile and Peru allocate the least public funding to higher education relative to GDP. But due to sizable private spending, and according to our sample (Table 2.9), they allocate two of the highest shares of GDP to higher education. Conversely, Argentina, Uruguay and Venezuela clearly invest in public HEIs rather than private ones. Colombia and Paraguay are positioned on the trend line, equitably opting for both private and public higher education institutions.

In recent decades, some of these countries have seen their public institutions affected by policies aimed at reducing public spending in the sector. Consequently, they have changed their funding system by increasing revenues through self-generated sources.

In some countries, public institutions have been asked to generate funds through alternative channels, including tuition fees and offering additional services (consulting and technical assistance). In this context, it appears that Chile is the country where privatisation has caused greater effects. Indeed, universities of this country have been able to self-generate about 70 % of their institutional income. In contrast, in countries such as Peru, Ecuador or Colombia, public HEIs self-generated between 20 and 30 % of their total revenues, while Bolivia, Argentina, Costa Rica, Brazil, Mexico, Venezuela, Uruguay and Panama only self-financed between 5 and 15 % of their total revenues (see Table 2.10).

Nevertheless, tuition-financed tertiary education may imply greater inequities (Holm-Nielsen et al. 2005). In this sense, several public but also private universities have begun enlarging their service portfolio, generating additional incomes while

Countries	All sources (public and private)	Public	Private
Argentina	1.1	0.9	0.2
Bolivia	NA	NA	NA
Brazil	0.8	-	-
Chile	1.7	0.3	1.4
Colombia	1.8	0.9	0.9
Costa Rica	NA	NA	NA
Ecuador	NA	NA	NA
El Salvador	NA	NA	NA
Mexico	1.2	0.9	0.3
Panama	NA	NA	NA
Paraguay	1.4	0.8	0.6
Peru	1.2	0.4	0.8
Uruguay	0.6	0.6	0.0
Venezuela	1.6	1.6	0.0

 Table 2.9
 Spending on higher education in Latin America as a percentage of GDP by source type

 (2008)
 (2008)

*Source*: UNESCO (2010) *NA* not available

Table 2.10Own resourcesof public institutions ofhigher education expressed asa percentage of total income(2005 and 2008)

Countries	2005 (%)	2008 (%)
Argentina	16	4
Bolivia	18	NA
Brazil	12	10
Chile	69	72
Colombia	20	NA
Costa Rica	15	NA
Ecuador	29	NA
El Salvador	NA	NA
Mexico	10	4
Panama	5	NA
Paraguay	NA	0
Peru	33	1
Uruguay	9	0
Venezuela	10	NA

*Source*: CINDA (2011a, b) (Table F.2.6) for year 2008. CINDA (2007) and IESALC (2006) for year 2005 *NA* not available

indirectly contributing to the development of the regions where they are settled. These new sources of revenue include contracting research, technical assistance and renting out facilities, amongst others. The key point here is that they might sit alongside but are fully integrated with mainstream teaching and research activities.

### 2.2.6 Changes in the Role of the State

Historically, central and federal governments played a significant role in planning and controlling Latin American HEIs, with very limited room for institutional differentiation. Traditionally, the Ministry of Education determined budget allocations, student admission policies and the content of offered programmes (Schwartzman 2002). Institutions can only decide the number of staff positions that should be covered, the wages as well as the internal evaluation processes for internal promotion.

With the expansion of the provision of educational opportunities for both private and public sectors, many central and federal governments transferred some of these responsibilities to the national or regional levels. One of the main consequences of this decentralisation is that HEIs now have greater autonomy, and funding for higher education has become more geographically dispersed. The rationale behind this reform of the higher education system lies in the general belief that only from a local perspective is it possible to effectively manage HEIs. In this particular framework, the role of the State can be characterised and evaluated based on four functions: (a) legislation, (b) financing, (c) management of knowledge and culture and (d) supervision and regulation.

The *legislation function* is the one through which the State delivers guidelines, policies and laws governing the system, as well as instructions for their implementation in harmony with the principles and values of the society it represents. In Latin America, the legal framework regulating the higher education system can be based on constitutional charters (e.g. Argentina, Brazil, Bolivia, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Dominican Republic and Venezuela), based on special laws (e.g. Cuba, Chile and Peru) or based on different legal standards for the public and private sectors (e.g. Uruguay) (Fernández 2004).

This diversity of legal frameworks depicts an interesting landscape that is complemented by the internal norms and functioning of HEIs. In this respect, while public universities are governed by internally elected academic leaders, private ones are managed and structured in a similar way as private enterprises. These profitoriented objectives of the latter tend to constrain internal mechanisms for the introduction of new changes and ways of doing things. As a result, faculty members often have limited influence on overall planning and management, compared to academic faculty working in public universities.

The *financial function* involves the role played by the State in providing the resources needed for the higher education system to operate expeditiously and smoothly, giving all citizens equal opportunities. As noted before, the new policies on funding and privatisation, which have been applied with different emphases in countries throughout the region since the 1980s, have led to new criteria for institutional management at both public and private entities. Consequently, emphasis is placed on the efficiency and accountability of fiscal revenues, based in some countries on the principle of self-financing.

The knowledge management function consists of fostering scientific development and technological innovation to support the country's economic growth. Initiatives are usually driven by the State, who suggests and leads the different initiatives proposed. However, and in contrast to the vast majority of OECD countries, few Latin American HEIs have a governance structure allowing the participation of representatives from the industry and civil society. This inward orientation and lack of openness is reflected in the weak existing links between these knowledge-intensive institutions (i.e. universities) and the other stakeholders of the region, leading to underexploited regional innovation systems. In this respect, it is incumbent upon the State to create the appropriate mechanisms and channels for interaction between academia and the productive sector in such a way that the production of new knowledge materialises into tangible or intangible assets that improve the well-being of the population. Furthermore, it is also the responsibility of the State to help raise the level of schooling of all citizens and lift the cultural level of the population by promoting standards of social behaviour that enrich coexistence in the country and strengthen national identity.

As for the role of *supervision and regulation*, the State cannot escape its regulatory responsibility that implies controlling the achievements of the system according to its own guidelines. This requires having the tools, mechanisms and appropriate indicators for measuring and controlling progress, achievements and the impact of the policies implemented. In addition, the State should establish regulatory frameworks with relevant standards and criteria. Accordingly, the role of the State involves acting not only as the legal authority but also as the guarantor that policies and programmes are adequately executed. Likewise, this institution should compile, systematise and disseminate public information considered relevant for decision making (González and Espinoza 2011a, b; Espinoza and González 2011).

Quality assurance of higher education can be considered within the supervision and regulation function. In Latin America, different *quality assurance systems* have been established. Examples include those of Argentina, Brazil, Colombia, Chile, Costa Rica, Cuba, El Salvador, Mexico, Jamaica or the Dominican Republic. While countries such as Bolivia, Ecuador, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago or Uruguay are just in their initial stages and have recently institutionalised accreditation agencies and started implementing assurance mechanisms, other countries such as Brazil, Colombia or Chile are in more advanced stages, now involved in reviewing their current mechanisms in order to improve not only the accountability of their higher education system but also the performance of their universities.

Broadly speaking, accreditation agencies are those institutions in charge of dictating the rules universities should follow in terms of quality. They are responsible for the evaluation, certification and accreditation of both academic programmes and faculty members. Types of accreditation agencies range from public agencies acting autonomously with regard to the national government (e.g. Colombia, Chile, Ecuador, Peru, Puerto Rico), governmental agencies (e.g. Argentina, Bolivia, Brazil, Cuba, Mexico, Dominican Republic, Uruguay), private institutions (e.g. Chile,

	Accredited	Accreditation of undergraduate	Accreditation of gradu programmes <sup>a</sup>	ate
Countries	institutions	programmes	Master's degrees	PhD
Argentina	NA	NA	196	105
Bolivia	NA	NA	NA	NA
Brazil	NA	NA	2,062	1,177
Chile	58 universities	795	92	58
Colombia	25 HEIs	774	NA	NA
Costa Rica	NA	50	17 <sup>b</sup>	
Ecuador	5 HEIs	NA	NA	NA
El Salvador	NA	NA	NA	NA
Mexico	334°	1,707	NA	NA
Panama	NA	NA	NA	NA
Paraguay	NA	21	NA	NA
Peru	2 universities	11	NA	NA
Uruguay	NA	8	NA	NA
Venezuela	NA	NA	113	25

 Table 2.11
 Advancements in accreditation processes in Latin America (CIRCA, 2010)

*Source*: Prepared by the authors based on Zenteno (2011) and Mendoza (2003) *NA* not available

<sup>a</sup>Graduate programmes accredited in 2006–2007

<sup>b</sup>Data for 2011. Disaggregated data are not available

°203 universities accredited by CIES and 131 private universities accredited by FIMPES. As such, there is duplication of entities accredited by the two agencies

Panama, Puerto Rico) or institutes from universities (e.g. Bolivia, Costa Rica, Panama, Peru and the Dominican Republic).

Accreditation agencies in Latin America are heterogeneous in their purposes (Lemaitre and Zenteno 2012). For instance, some of them evaluate only academic programmes and other agencies evaluate institutions as a whole. Some agencies evaluate the institutional project and authorise the initiation of activities; others provide full licensing or autonomy. In some countries all these processes are compulsory and in others are voluntary. Moreover, all these functions could be simultaneously done jointly or separately by one agency (Pires and Lemaitre 2008).

Common problems Latin American countries face with regard to quality assurance in higher education refer to insufficient qualifications of teaching staff (very few of them hold a PhD degree), overcrowded universities, obsolete and deteriorating physical facilities and equipment, as well as weak learning outcomes in primary and secondary education (De Wit et al. 2005).

As shown in Table 2.11, the number of accredited institutions, undergraduate and graduate programmes in the region is notably low in relation to the total number of existing entities. This implies that there is still a long way to go in terms of quality assurance.

The recent trend in public consciousness for accountability jointly with the desire to perceive returns on public investments has accelerated the debate over how to control and ensure higher education quality. Quality assurance methods used by accreditation agencies in Latin America include institutional self-assessment reports, external peer review, student assessment and, above all, quantitative performance indicators. However, while these assessment approaches are undoubtedly influencing the strategy of HEIs, the main problem arising from indicator systems relates to the opportunity cost of obtaining the necessary data to appropriately represent it. Incomplete records and nonhomogeneous procedures to collect information amongst different universities hinder the characterisation process of indicators to assess the quality of HEIs. Particularly, Latin American governments have neither the resources nor the means to effectively obtain primary and reliable data about their higher education systems. Therefore, indirect measures of quality assurance are used in which indicators are usually the easiest to obtain but not the best for expressing a particular asset.

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## Chapter 3 Trends and Dynamics of Strategic University Management in Ibero-American Higher Education

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**Abstract** This article seeks to examine if there are significant differences in the strategic management processes that may identify positive or negative conditions for improving these processes. A survey is carried out in the context of HEIs in Ibero-American countries, and focusing on the concern with strategic planning, this study analyses how the nature of strategising in universities interacts with the governance-level policies of the higher education system and a particular modelling of the strategy process. Therefore, a critical examination of the strategy modelling in different countries is addressed, highlighting how particular experiences might be instructive for better strategising in universities.

**Keywords** Strategising • Strategic planning • Strategy process modelling • Higher education

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## 3.1 Introduction

The higher education landscape within most countries around the world has changed as a result of institutions' growing diversification. Many of the 'new' providers have been built on the foundations of earlier models with limited research traditions (e.g. teaching and technical schools) and have a 'specifically regional mission' (OECD 2007, p. 36). The development of alternatives to universities within the higher education sector has been criticised for the highly segmented nature of these options, their varying quality and the professional relevance of the programmes. Other problems may include institutional instability, lack of orientation, excessive heterogeneity, lacklustre internal organisation of the system, saturation of areas of study and the disproportionate number of institutions (Bernasconi 2006; Castro and Levy 1997; De Wit et al. 2005). These features and problems are particularly relevant when analysing the higher education system in many Ibero-American countries, especially in the context of Latin America.

The recent Organisation for Economic Co-operation and Development (OECD) report on higher education investment in the Ibero-American region (OECD 2013) acknowledges that an increasingly globalised higher education landscape puts competitive pressure on institutions faced with the need to improve their performance in order to attract students and meet their international standards. Also, part of the main challenges of higher education in the region remains unsolved, mainly those related to the quality, pertinence and access to higher education. Additionally, one of the main debates around higher education in this region is related to its financing. Within this context, it is unquestionable that higher education has gained importance on national agendas, as it generates both economic and noneconomic benefits for societies as a whole and for individuals. Therefore, in an increasingly knowledge-based economy and society, higher education plays a decisive role in the creation and dissemination of high-level knowledge, as well as in putting it to use for the benefit of society.

Nonetheless, the question posed here is how the management of universities can ensure achieving these outstanding objectives either at a more macroeconomic perspective (decisive role in the upgrading and diversification of the economic structure) or an individual perspective (endows individuals with better training and more sophisticated skills). These questionings cannot be debated without taking into account the influential role of the national governments in developing particular governance models, policies and strategies. Therefore, the main objective of this article is to contribute to the debate about how HEIs define their strategies and what the impact of their choice may be.

This encompasses how they carry out their tasks of strategic analysis, selection, implementation, review and change in order to create value and sustain their advantages. Accordingly, much attention on the study of strategy derives from a search for models of better strategy, for the transference of strategic success from one organisation to another (Buckland 2009). In consequence, this study examines the models of applicability of strategy for universities in different countries of Ibero-America, addressing whether this comparative analysis may offer convergent elements of positive and negative conditions that take place in strategy making or whether this comparative analysis may deliver practical implications for institutions across those countries.

Therefore, the following research question guided this study:

What are the types of strategic management processes at the Ibero-American HEIs?

This study seeks to examine if there are significant differences in the strategic management processes that may identify positive or negative conditions for improving these processes. In the next section, a review on the development of strategy process and strategic planning in universities is elaborated, particularly addressing studies within the context of HEIs in Ibero-American countries. Furthermore, focusing on the concern with strategic planning, this study analyses how the nature of strategising in universities interacts with the governance-level policies of the higher education system and a particular modelling of the strategy process.

Next, the methodological approach used in this research project and the analysis process being applied are described. Consequently, this study explored strategy making experiences across 15 countries in the Ibero-American region: Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Spain, Mexico, Panama, Paraguay, Peru, Portugal, Uruguay and Venezuela. In subsequent sections, a critical examination of the strategy modelling in different countries is addressed, highlighting how particular experiences might be instructive for better strategising in universities, taking into account convergent and divergent variables concerning the enhancement of strategy process.

## 3.2 Strategising in Universities: Strategy Modelling and Its Relationship with Governance-Level Policies

The current debate in the higher education sector acknowledges that in an environment characterised by systematic changes and increasing competition, it is imperative for HEIs to align their resources and capacities with the requirements of context in order to support them in achieving their mission and institutional goals, which should be embedded in a framework of efficiency, effectiveness and quality (e.g. Amaral and Magalhães 2001; Amaral 2009; Rodríguez-Ponce and Pedraja-Rejas 2009). From the empirical perspective, studies that have addressed how HEIs strategise shed light on how the design and implementation process of the strategy in universities have significant flaws, suggesting avenues for improvement in order to achieve high levels of institutional quality (Machado et al. 2004; Taylor 2007; Rodríguez-Ponce and Pedraja-Rejas 2009).

According to Hardy and Fachin (1990), managing universities means striving for ambiguous objectives, involving various electoral groups, relatively ill-defined

technologies and highly specialised core professionals (or professors) and working in an exposed and vulnerable environment. Correspondingly, university management has to incorporate such factors and to develop an approach with an appropriately matching style. Frequently, questions of shared governance, the role of leadership and the changeover from bureaucratic management to a more professional approach have been of major concern. Particularly focusing on the role of governance and leadership in managing universities, Burquel (2012, p. 4) argues that current reforms in the higher education sector worldwide offer many opportunities for HEIs to rethink themselves and to exercise more fully the autonomy gained in increasing numbers from the State, though many institutions seem unable to do so. One of the main reasons for this is the lack of strong institutional capacity, leadership and management to make strategic choices based on institutional strengths, to build a strategic position and to communicate adequately with society and play a key role in addressing the increasing problems of society.

Consequently, many national European governments are reviewing the overall higher education landscape, questioning the number and types of institutions needed at a national level to serve public agendas and reach a critical mass. This is increasingly leading to institutional mergers, alliances and strategic partnerships. Specifically, in the European case, new forms of multilevel and multi-actor governance are emerging, and according to van Vught (2009, p. 18), higher education and research institutions cannot ignore the effects of the multilevel processes that govern them. They need to design and implement institutional strategies that allow them to play their own roles in the new system dynamics of EU higher education and research. Within this context, Burquel (2012) contends that while the degree of autonomy that universities enjoy from state control is generally increasing in European countries, there are still many constraints placed by the State. This impacts the capacity of HEIs to manage complex sets of strategic developments, to define appropriate policies and organisational arrangements and to find the right mix of human and financial strategies to support their overall vision to help address all challenges of society.

Traditionally, university governance and decision-making processes were based on collegial arrangements involving the whole academic community (OECD 2003, 2008). The general trend now is towards increasing the level of autonomy for HEIs. For instance, De Boer and File (2009, p. 13) posit that the widening of institutional autonomy has also led to the strengthening of institutions as organisations and the rearrangement of authorities and responsibilities across different levels resulting in stronger leadership now located at the top of the university. In the particular case of countries in the Ibero-American region, Brunner (2011) in his study of trends in higher education governance noted that higher education systems in Latin America have two peculiar characteristics if compared to most of the OECD countries and in particular with European countries. On the one hand, there is the concept of institutional autonomy understood as institutional autarchy against the weak or powerless national governments in higher education matters, and on the other, there is an explosive growth of private higher education.

Concerning the public sector, Brunner (2011) contends that most of the Latin American public universities present a collegial model of university governance, with a strong emphasis on a co-democratic government and bureaucratic management structures which are weakened by politicisation. Consequently, the decision-making processes are slow, people in management positions have no professional training, and academic managers do not have authority to make strategic decisions (Schwartzman 1996). Within this context, Brunner (2011) argues that Latin American public universities are over-administered with a sense of a fractional and paralysing bureaucracy, and they are also submanaged if we consider the entrepreneurship characteristics contended by Clark (1998) and Shattock (2003). As a consequence of these particularities, a number of organisational pathologies can emerge: an institutional vision not aligned with academic management or resources, an academic management decoupled from the environmental and contextual needs and demands, a purely inertial resource allocation as well as an academic management that does not take into account administrative and financial restrictions, which ends up being impossible to count with a strategic planning process (Samoilovich 2008).

Regarding the Latin American private sector, there are some characteristics that may explain its role in the region. On the one hand, as a consequence of the explosive growth of public institutions, governments across many countries have introduced new programmes and regulation in order to regulate the sector. On the other, specialised agencies were established in order to assess and accredit the public and private institutions. Therefore, at the governance level, some advances such as the creation of units of institutional analysis, the development of strategic planning and the use of performance indicators as well as the elaboration of improvement programmes (Brunner 2011). Additionally, governments started to partially change the benevolent funding schemes of public institutions, structuring it on the basis of inputs not only conditioned by performance and results but using a range of market-type tools and mechanisms for allocating public resources (Brunner 2009). Taken together, these dynamic changes and impacts from the regulatory environment in Latin America may be the subject of conflicting interpretations.

## 3.2.1 Strategic Management Development in Higher Education: Dynamic and Problematic

In recent years, a large number of studies have tried to analyse the use of strategic planning in HEIs attempting to correlate the current efforts of the university with the emergent environmental changes (Tsiakkiros and Pashiardis 2002). Several studies have focused on tools that have supported the strategy design. For instance, Dyson (2004) explored the Warwick University strategies by means of SWOT and its relation with scenario planning and resource-based planning. Also, Gill and

Lashine (2003) probed the potential of business schools in satisfying the needs of society and industry examining the positioning strategies of management education, business school staffing, accommodations and teaching method strategies. Often strategic management is seen and modelled in a logical, systematic and objective way to make decisions in the organisation, by the use of qualitative and quantitative information. The modelling of the process often follows three main concepts: (1) strategic analysis, (2) strategic choice and (3) strategic implementation (David 1997).

Concerning the strategy analysis, some studies explored the necessity of strategic environmental analysis in HEIs' strategic planning (Kettunen 2006; Brock 1997; Luby 1996). Analytical tools from various approaches are chosen according to the environmental characteristics of the industry by understanding the priorities and strategic aims of that industry. According to Buckland (2009), the development of universities' strategising has been largely devoid of the incorporation and analysis of context and process - known from private sector studies to be vital in the effectiveness of strategic analysis. Another concern according to Buckland lies with the centrality of leadership to the formation, choice and implementation of strategy. The management of university leadership has, of course, varied widely across systems. On the other hand, the importance of contingency is another concern in university strategising. Strategies are not merely contextual in their management; they are contextual in their formation, relevance and impact. Contingency, indeed, might be what sets strategy apart from mere decision: the 'higher level' consists of the influence that a strategic decision has upon future opportunities and choices, its determination of later fields of potential action and its effects on attitudes and on competitor behaviour.

Additionally, several studies have explored the dynamic and problematic way universities are managed. The studies of Tierney (2001) and Machado et al. (2004) also point out some of the problems related to changing the way HEIs are managed, including: the lack of consensus on what the actual problems are, who is responsible for them and how to achieve this, the lack of compliance with deadlines for problem resolution in extensive and complicated processes, the lack of good evaluation processes due to the need to meet deadlines, ineffective internal communication systems, bureaucratic rigidity and the lack of believing that the change processes are going to work for the better.

In this vein, Rosa and Amaral (2007) explored relevant barriers in the modernisation of higher education management, such as insufficiently explicit institutional priorities and objectives, lack of a clear definition of stakeholder needs and expectations, lack of a clear identification of the participants in higher education and the definition of priorities, problematic teamworking and high levels of individualism, lack of a fundamental need of what and how to measure the results, lack of efficient communication channels and the bureaucracy impacting decision-making. Finally, leadership is a crucial factor when adopting a professional management approach.

# 3.2.2 Ibero-American Higher Institutions' Relationship with Strategic Management

Nevertheless, there are a few studies that have specifically examined the advancements of institutional strategic management in the context of the previously described governance models and political strategies. An earlier study (CINDA 2007) explored institutional experiences of strategic management for quality purposes from 16 institutions from Latin America such as Chile, Colombia, Ecuador and Peru and also experiences from Spain. The study highlighted the relatively recent use of the strategic planning tool for most of the analysed universities. For these institutions, the coexistence within the institutional management of academics (mostly derived from knowledge areas not related to management) and nonacademic professionals did not facilitate the incorporation of a systematic management system. On the other hand, the HEIs' cultural rooting, especially the public sector, was another factor that did aid the adoption of advanced strategic management approaches, especially concerning strategic change intents.

According to CINDA's study (2007), some specific factors emerged as improvement aspects in the analysed strategic planning processes. Such factors were associated with the need of mapping the primary stakeholders, the need of developing the corporate social responsibility integrating it within the institutional strategy, the necessity of adopting prospective techniques in order to elaborate strategic scenarios and debating alternative strategic options, the relevance of identifying the "core competencies" associated with a competitive advantage, the importance of counting strategic communication of the strategic planning as well as the need for placing more emphasis on monitoring and assessing the formulated strategy.

In a comparative perspective of the strategic management process of institutions in Ibero-American countries, Rodríguez-Ponce and Pedraja-Rejas (2009) explored experiences from 16 institutions, noting that the majority of them carried out an appropriate analysis of their overall environment. However, most of them presented significant deficiencies in the definition of the institutional mission, in the analysis of the competitive environment, in the examination of resources and capacities and in the design as well as in the implementation of the strategy. This study suggested that the analysis of resources and capacities was a key determinant of success and the strategy design was the fundamental determinant for successful strategy implementation. Particular studies with emphasis in specific countries, for instance, the study of Machado et al. (2004), explored the status of strategic planning in Portuguese institutions, arguing that there was a problematic concern for the implementation of the strategic planning processes, noting that the number of institutions that could legitimately be classified as strategic planners was incongruent with the self-reported findings of the data. A further study (Machado and Taylor 2010) on the strategic management of Portuguese institutions argued that the concept of strategic planning within the Portuguese HEIs was only beginning to evolve. While some sincere efforts were found, they were accompanied by naive misunderstandings, inflated self-reporting and fragmented implementation in many cases.

In Spain, a similar study explored the usefulness of strategic management tools (Llinàs-Audet et al. 2011). Strategic planning was the most popular management tool adopted by Spanish universities, and these institutions showed an improvement within the decision-making process as well as an enhancement in key institutional process. However, many institutions reported methodological concerns, specifically concerning the complexity of managing and integrating all relevant stakeholders in the strategic project. In Chile, explored the relationships between the design and implementation phases of the strategy and institutional quality, showing that the definition of the institutional mission and the analysis of the competitive sector and of relevant resources and capabilities were the main determinants of the design and implementation of corporate strategy. Even if studies have tried to explore the advancement of the strategic management in the Ibero-American region, no exhaustive comparative analysis on this subject exists.

### **3.3 Design of the Study**

## 3.3.1 Strategic Management-Specific Research Model Variables

The literature provided the theoretical background for defining the variables of the strategic management process as well as the factors influencing this process. These variables are operationalised within a specific research model based on theoretical assumptions from empirical evidence. This model can be seen in Fig. 3.1.



Fig. 3.1 Higher education strategy management specific research model

The variables within layer 1 comprise the theoretical assumptions for antecedents of strategic management in higher education research. In layer 2, some context variables of the strategic management process were conceptualised on the basis of the following assumption: because universities in different countries may be heterogeneous organisations and present different structures, not all institutions might be subjected to the same contextual factors. Thus, dimensions can be conceptualised on which process variables are convergent or differ from institution to institution and country by country and which contextual factors influencing the process in a positive or negative way might differ from institution to institution.

## 3.3.2 Sampling Strategy and Data Analysis

The empirical study focused on obtaining data that reflected the national situation regarding the use of strategic management techniques. In some cases, certain types of institutions were aimed at, focusing mainly on public and private universities. Given that the questionnaire is a consensual tool to develop a structured data collection process, it gathered information related to the variables embedded in the research model (Fig. 3.1). Thus, the questionnaire contained a series of theoretically structured questions and therefore allows for obtaining unbiased information in order to meet the objectives of this research. Specifically, the questionnaire has been divided into two parts: the first, intended to collect information on the process of strategy development. This first part was then structured into four sections, including questions that tried to address the different aspects of the strategy development process (e.g. strategic thinking, strategic choice, strategic implementation and strategic monitoring and learning). The second part contained variables about the organisational aspects of the institutions participating in this study.

Accordingly, the design process has followed very rigorous steps to ensure the success of the study. Firstly, the questionnaire was submitted to an expert review. Secondly, given that this study has been administered in different countries, an adaptation of the text in each context, in terms of language style and concepts, was conducted in order to ensure adequate understanding of its content. Finally, the questionnaire was submitted to a comprehension test (Hernández Sampieri et al. 2003). This last step provided relevant information that allowed for improvements before implementation.

Consequently, all the variables of process and context (Fig. 3.1) were operationalised in the questionnaire using multiple choice and open-ended questions, enabling information to be gathered on the institutions' strategic management systems by applying scales of 'yes' and 'no' or a five-point scale (Likert scale) ranging from 'very high' to 'very poor'. This design aimed at facilitating the subsequent quantitative analysis, while leaving room for respondents to also express their opinions and enrich the analysis through perspectives and insights. Although the study did not divide the quantitative analysis according to the public or private sectors of the HEIs surveyed, it is important to highlight the participation of both types since this has enabled us to identify significant differences between the two groups of institutions.

The implementation of the survey was conducted electronically via a web form and consisted of a nonrandom sample of mainly public and private universities across 15 Ibero-American countries: Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Spain, Mexico, Panama, Paraguay, Peru, Portugal, Uruguay and Venezuela. The target population for this study consisted of one representative in a managerial position (chancellors, vice chancellors, directors and/or quality technicians) at the aforementioned universities. Only one questionnaire per institution was administered and thus only one response per institution.

These countries were selected due to the fact that the study has been implemented in the framework of a partnership of universities belonging to these respective countries – contacts that have facilitated the survey application across the universities within the mentioned countries. Quota sampling (Groves et al. 2009), which is a type of stratified sampling, was applied in which selection within the strata is nonrandom. Based on the information from the ministry and authorities responsible for coordinating higher education in those countries, the approximate total of recognised public and private universities was 3,596 (data corresponded to 2011/2012 period). Therefore, applying a confidence level of 99 %, with an expected rate of 50 % and an accuracy of 1 %, the strata to be used were established as the higher education coverage rate. Based on that, a total of 1,065 survey packages were mailed during the academic years of 2010–2011/2011–2012, and a total of 431 responses were received. Table 3.1 gives an overview of the response rate in each country.

The data collected from the survey responses were entered into the SPSS and analysed using software package SPSS version 20.0. Descriptive statistics for all variables in this study were examined using SPSS frequencies. Results of the study are followed by each research question according to the research model variables.

## 3.4 Results

The first aspect to be described is the answer to the research question explored by this study:

#### What are the types of strategic management processes in Ibero-American HEIs?

As such, the variables used to address this question were related to the process: strategic thinking and choice, implementation and learning. Also, context variables were used to help interpret the identification and description of the types of strategic management processes in place across the analysed countries. Furthermore, a comparison of the frequencies of each variable for process and context was conducted

			Criteria of sample represen	ntativeness
Country	Population	Sample	No. of HEIs	Coverage rate <sup>a</sup>
Argentina (AR)	87 universities	14	16.09 %	1
Bolivia (BO)	59 universities	27	45.7 %	75.4 %
Chile (CL)	60 HEIS	18	30 %	41.01 %
Colombia (CO)	115 (university institution/technology school)	19 (university institution/ technology school)	16.6 %	24 %
	80 (universities)	58 (universities)	73 %	<i>%</i> 69
Costa Rica (CR)	15 (selected)	12	80 %	97.8 %
Ecuador (EC)	68 (universities and polytechnic schools)	13	19 %	22.2 %
El Salvador (SV)	78 (24 universities, 15 institutes – technology and	32	68.8 % universities	68.8%
	specialised)		18.8 % specialised inst.	
			12.5 % technology inst.	
Spain (ES)	74	60	81 %	89.5 %
Mexico (MX)	176 HEIs	80	45.5 %	60.9 %
Panama (PA)	40 universities	27	67.5 %	79.4 %
Paraguay (PY)	45	7	15.5 %	43 %
Peru (PE)	15 universities	14	93.3 %	13 %
Portugal (PO)	87 HEIS	14	16 %	40 %
Uruguay (UY)	15 universities	15	100%	100 ~%
Venezuela (VE)	51 universities	21	41.1 %	96.7 % (public)
				3.21 % (private)
<sup>a</sup> The coverage rate is	the percentage of the capacity of the educational syst	em to enrol students in a specific leve	el of education. We used dat	a from the higher

Table 3.1 Sample distribution according to country demographics (higher education coverage strata)

education coverage rate, published by the regulatory authorities for the higher education system in the different countries, as a basis for calculating the sample's representativeness in terms of the coverage of students enrolled to determine quota sampling. In certain countries, they are separately stratified, specified by types of institution of higher education (universities, institutes, etc.), and always in accordance with the institutions' relevance in their contribution to the country's student enrolments across countries in order to provide evidence for examining the communalities of elements in the strategic management processes that may identify positive or negative conditions for improving these processes.

### 3.4.1 Strategic Thinking and Choice Process Variables

#### 3.4.1.1 Adoption of Strategic Management Processes

We made an initial observation of the existence of institutional strategy at HEIs. In this respect, the survey led to a clear conclusion: the existence of a culture of strategy formulation in most of the countries studied. This variable (mission definition) was explored by asking the institutions about the existence of an established process for the development and revision of the institutional policy and strategy, in accordance with a mission and formalisation (M=4.47; SD±0.586 on a 1–5 scale; see Table 3.2).

According to the overall mean observed in the table, the university responded with strongly agree on having a systematisation process to develop their institutional strategy. Additionally, it can be noted that three countries (Spain, Peru and Portugal) were below the overall average; however, their individual means do not present a relevant disparity if compared to the overall mean. Therefore, if compared to overall data, participation rates and responses are similar.

	Existence of	f a process for strat	tegy definition a	nd revision	
Country	F	%	$\mu_{ m i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$
Spain	52(54)	96.30	3.90	1.09	4.47
Paraguay	6(6)	100.00	5.00	0.00	
Costa Rica	12(12)	100.00	5.00	0.00	
Uruguay	5(7)	71.4	5.00	0	
Chile	16(18)	88.89	5.00	0.00	
Argentina	14(21)	66.6	4.00	0.63	
Bolivia	25(27)	92.59	4.16	0.37	
Panama	24(27)	88.89	4.00	0.78	
Peru	14(20)	70.00	3.86	0.77	
El Salvador	28(32)	87.50	4.29	0.46	
Ecuador	13(13)	100.00	5.00	0	
Venezuela	17(21)	80.95	4.35	0.49	
Mexico	80(80)	100.00	4.53	0.75	
Colombia	77(77)	100.00	5.00	0.00	
Portugal	13(13)	100.00	3.62	0.65	

 Table 3.2 HEIs with strategic projects distributed by country

(n°) Number of institutions per country

(p) Missing values

#### 3.4.1.2 Environmental and Competitive Analysis

For diagnostic analysis, we asked the institutions how the environmental and competitive analyses were approached when carrying out their strategic thinking process. On the one hand, we have examined if a systematic analysis process exists based on economic resources, environment, competitors, internal indicators and previous planning results.

As seen in Table 3.3, not all the participating institutions in the analysed countries provided quantitative data for this variable. Some countries had qualitative comments which are included here. The first aspect taken into account is the data showing the countries that use a more robust strategic diagnostic analysis, that is, when carrying out this process, they considered different sources of information. Spain, Uruguay, Panama, Peru and El Salvador reported conducting a systematic analysis based on economic resources, environment, competitors and also specific results of previous planning. Their systematic analysis was additionally supported by the inclusion of results in the overall institutional self-assessment and internal indicators. Within these countries, it is also possible to observe some slight differences. For instance, Spain and El Salvador had a lower number of institutions using a more systematic strategic analysis diagnostic process, but the differences were again not very meaningful. Furthermore, there is a second group of countries (Costa Rica, Bolivia and Colombia) who established a systematic approach for conducting a strategic diagnostic analysis, however without specific establishment of internal indicators or results of institutional self-assessment. And the final group with two examples, one in Mexico, where institutions did not provide evidence of counting with a systematic strategic diagnostic dynamic, however were working to build a system of internal indicators as the basis of strategy development. Second, in Portugal, the institutions are using the results of their institutional self-assessment exercises.

On the other hand, some countries did not provide responses to this specific variable: Paraguay, Chile, Argentina, Ecuador and Venezuela. In the case of Argentina, Paraguay and Chile, the universities did not mention that they specifically used internal indicators or self-assessment exercises, but when formulating their strategy, they used some forms of strategic tools such as building scenarios, market analysis or conducting SWOT analysis. The responses were not informative on the use of these tools in a systematic way, during the formulation nor in revision of their institutional strategy. Similarly, in the case of Ecuador, the use of SWOT analysis, building scenarios as well as market analysis was mentioned; however, using performance indicators, which the universities in this country called 'success indicators', was associated with specific strategic areas defined by the CONEA (National Assessment and Accreditation of Higher Education body) for the institutions' accreditation process. Finally, in the case of Venezuela, the use of strategic analytic tools (SWOT, market analysis and scenarios) was also reported, but universities, in most cases public institutions, systematically utilise the results of previous planning, even though no information about how this process is conducted was provided.

	Elements t	that are pr	eviously	taken in	to accour	nt when pre-	paring the	formula	tion and	revision	of the instit	utional str	ategy and	l policy	
						Results of	the institu	utional se	Aff-assess	ment	Systematic resources,	c analysis environm	based on ent comp	economic etitors and	0.9
	Internal in	ndicators				exercise					results of ]	previous p	lanning		
Country	F	%	$\mu_{\rm i}$	σ	$\mu_{\mathrm{Total}}$	F	%	$\mu_{\rm i}$	σ <sub>i</sub>	$\mu_{\mathrm{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$
Spain	30(54)	55.6	5.00	0.00	4.17	29(54)	53.7	4.69	0.87	3.96	51(54)	94.4	3.71	1.33	3.84
Paraguay	6(p)	I				6(p)	1				6(p)	I			
Costa Rica	12(p)	I				12(p)	I				12(12)	100.0	3.83	1.03	
Uruguay	( <i>L</i> ) <i>L</i>	100.0	4.00	0.58	1	7(7)	100.0	3.43	0.98	1	( <i>L</i> ) <i>L</i>	100.0	3.14	.378	
Chile	18(p)	I				18(p)	I				18(p)	I			
Argentina	14(p)	1			1	14(p)	1			1	14(p)	1			
Bolivia	27(p)	I			1	27(p)	I				27(27)	100.0	4.33	.784	
Panama	27(27)	100.0	3.93	0.92	I	27(27)	100.0	3.93	0.92	1	27(27)	100.0	3.93	.958	
Peru	11(14)	78.6	3.36	1.36	1	11(14)	78.6	3.36	1.36	1	14(14)	100.0	3.21	0.80	
El Salvador	20(32)	62.5	4.40	0.50	[	20(32)	62.5	4.30	0.47	1	31(32)	96.9	4.23	1.055	
Ecuador	13(p)	1				13(p)	1				13(p)	I			
Venezuela	21(p)	Ι				21(p)	Ι				21(p)	I			
Mexico	66(80)	82.5	4.44	0.50		80(p)	Ι				80(80)	I			
Colombia	77(p)	I				77(p)	1				77(p)	100.0	4.33	.839	
Portugal	13(13)	100.0	4.08	0.28		13(13)	100.0	4.08	0.28		13(p)	1			
(n°) Number o	f institutions lues	s per coun	try												

Table 3.3 Trends for strategic diagnostic process

82

	General id	leas and	guideli	nes		Explicit st periodical	trategy de lly	veloped	1	
Country	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$
Spain	14(54)	25.9	5.00	0.00	4.42	39(54)	72.2	5.00	0.00	4.42
Paraguay	6(6)	100.0	5.00	0.00		6(6)	100.0	5.00	0.00	
Costa Rica	1(12)	8.3	5.00	0.00		10(12)	83.3	5.00	0.00	
Uruguay	5(7)	71.4	5.00	0.00		2(7)	28.6	5.00	0.00	
Chile	18(18)	100.0	3.00	0.00		18(18)	100.0	4.77	0.65	
Argentina	2(14)	14.3	5.00	0.00		12(14)	85.7	4.58	0.51	
Bolivia	27(p)	-	-	-		27(27)	100.0	4.00	0.55	
Panama	5(27)	18.5	5.00	0.00		14(27)	51.9	4.50	0.52	
Peru	4(14)	28.6	5.25	0.50		5(14)	35.7	4.40	0.54	
El Salvador	4(32)	12.5	4.00	0.00		26(32)	81.3	4.31	0.47	
Ecuador	13(p)	-	-	-		13(p)	-	-	-	
Venezuela	6(21)	28.6	4.50	0.54		11(21)	52.4	4.50	0.52	
Mexico	10(80)	12.5	4.00	0.00		22(80)	27.5	4.00	0.00	
Colombia	77(p)	-	-	-		77(p)	-	-	-	
Portugal	6(13)	46.2	2.38	0.65		12(13)	92.3	3.07	0.64	

Table 3.4 Trends on strategy processes characteristics (formality vs. informality)

(n°) Number of institutions per country

(p) Missing values

#### **3.4.1.3** Formalising the Institutional Strategy

In terms of systematising strategy formulation processes, the HEIs were asked if they periodically define their strategies: as a result of a formal process or strategic directions characterised by general ideas and or guidelines. According to Table 3.4, HEIs involved in planning processes were either formal or more informal. Indeed, most HEIs claimed to have formal, periodic strategy formulation processes.

Moreover, a very low rate of missing data as well as the high participation rate, reaching up to 51 %, for the two main strategic process formulation characteristics allowed us to conduct more concrete comparative observations. The countries with a lower rate of response for the variable 'strategy seen as general ideas and guide-lines' were Costa Rica, Argentina, Panama, El Salvador and Mexico, with participation rates below 20 %. Concerning the variable 'strategy is explicit and formulated periodically', Uruguay and Mexico had a participation rate lower than 30 %. The average responses for each variable reveal a systematic approach to the strategy formulation across the countries as most were above the overall average. More specifically, in Portugal, the universities seem to not agree with the variables, that is, the individual mean is below the overall average.

In most countries, the institutions responded affirmatively to both variables providing evidence of a broader approach when conducting the strategy formulation process rooted in general guidelines, but also embedded into a more formal process. In the specific case of Chile, previous studies have demonstrated that the HEIs initially tended to have more strategic general directions than strategic plans (Cáceres 2007), which supports answering affirmatively in most cases for both variables. In the case of Chile, the variable 'strategy seen as a general guideline', even though the mean value was not strong enough (=3), it is still possible to suggest an affirmative response associated with this variable. With Portugal, universities were more divided when trying to provide evidence on the formalisation of their strategy process, as the individual mean for both variables is below the overall average. A uniformity of responses can be seen when observing the standard deviations. In all cases for both variables (strategy as a general guideline and strategy as a formal process), the deviations are below 1. If we only analyse the standard deviations for the first variable (strategy as a general guideline), only Peru, Venezuela and Portugal are between 0.5 and 0.7, with the rest of the countries around 0 suggesting no significant differences in terms of responses mostly ranging between 3 and 5.

Furthermore, we see a somewhat different case with Uruguay, who reported a higher frequency associated with developing the definition of strategy based on general definitions developed and revised on a regular basis, but some institutions provided evidence of conducting a more systematic and formal process of strategic planning. Ecuador and Colombia were the only countries that did not provide quantitative response for these variables. In Ecuador, HEIs commented that the organic law that regulates higher education, approved in 2000, obliges all institutions to establish an institutional development plan or strategic plan. This sine qua non condition is requested both for the establishment of new institutions and for the accreditation process. This suggests that all institution have some form of strategic planning process as a result of a formal mandatory procedure. If we take into account the standard deviations for both variables, there is a generalised trend in the formalisation of a strategy within a process, as most of the institutions across the countries answered four or above.

#### 3.4.1.4 Temporary Nature of Strategy Planning Processes

Regarding the continuity in the strategy development overtime, the questionnaire explored two main aspects of the temporary nature of the dynamic strategy process present in the HEIs: the number of planning cycles being developed and the timeline embedded in this planning (Table 3.5).

For 'number of planning cycles', in all of the countries, except from Venezuela and Chile, the trend was around two or three cycles. Approximately, in 50 % of the analysed countries, the institutions developed three planning cycles or more. Overall, a very diverse picture across the countries emerges. For instance, the institutions in Chile and Venezuela, according to their mean 3.28 and 3.0, suggest a long history of developing strategic planning. Specifically, in the case of Venezuela, a uniformity in the institutions' responses was observed as the standard deviation is around 0 in contrast with Chile which is around 0.46.

The overall average percentage of the countries reveals a response rate of 89 %, which provides evidence to support the uniformity of responses among the analysed

	Planning cycles						Planning horizon					
							Years covering the					
Country	Number of cycles	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$	strategy planning period	F	%	$\mu_{\rm i}$	σ <sub>i</sub>	$\mu_{\mathrm{Total}}$
Spain	2 cycles	20(54)	37.0	1.47	0.73	2.49	3-5 years	34(54)	63.0	2.15	0.432	2.75
	3 cycles	6(54)	11.1				6-8 years	4(54)	7.4			
	More than 3 cycles	4(54)	7.4				Others (flexible)	1(54)	1.9			
Paraguay	2 cycles	1(6)	16.7	2.83	1.32		Others (flexible)	(9)9	100.0	4.00	0.00	
	3 cycles	2(6)	33.3									
	Others	3(6)	50.0									
Costa Rica	2 cycles	1(12)	8.3	3.25	1.05		Others (flexible)	12(12)	100.0	4.00	0.00	
	3 cycles	2(12)	16.7									
	More than 3 cycles	2(12)	16.7									
	Others	7(12)	58.3									
Uruguay	2 cycles	1(7)	14.3	2.57	1.13		Others (flexible)	( <i>L</i> )	100.0	4.00	0.00	
	3 cycles	3(7)	42.9									
	More than 3 cycles	1(7)	14.3									
	Others	2(7)	28.6									
Chile	More than 3 cycles	13(18)	72.2	3.28	0.46		6-8 years	6(18)	33.0	3.00	0.00	
	Others	5(18)	27.8									
Argentina	2 cycles	9(14)	64.3	1.71	1.14		2 years	5(14)	35.7	2.00	1.04	
	3 cycles	2(14)	14.3				3-5 years	6(14)	42.9			
	More than 3 cycles	1(14)	7.1				6-8 years	1(14)	7.1			
	Others	2(14)	14.3				Others (flexible)	2(14)	14.3			
Bolivia	2 cycles	14(27)	51.9	1.58	0.70		3-5 years	18(27)	66.7	2.00	0.00	
	3 cycles	9(27)	33.3									
	More than 3 cycles	3(27)	11.1									

Table 3.5 Strategy process maturity and horizon

(continued)

,	`											
	Planning cycles						Planning horizon					
Constant	Number of avoles	2	ci,		l		Years covering the	L.	67		ų	:
COULITY	TAUTION OF CALCS	L.	<i>9/</i>	hi	5	pd Total	suarcey prairing periou		0/	hi	i i	<b>µ</b> Total
Panama	2 cycles	16(27)	59.3	1.89	1.18		2 years	10(27)	37.0	2.11	1.12	
	3 cycles	2(27)	7.4				3-5 years	9(27)	33.3			
	More than 3 cycles	5(27)	18.5				6-8 years	3(27)	11.1			
	Others	4(27)	14.8				Others (flexible)	5(27)	18.5	1		
Peru	2 cycles	4(14)	28.6	2.20	1.03		2 years	1(14)	7.1	3.31	1.11	
	More than 3 cycles	6(14)	42.9				3-5 years	3(14)	21.4	1		
El Salvador	2 cycles	8(32)	25.0	2.41	1.12		2 years	1(32)	3.1	2.24	0.74	
	3 cycles	7(32)	21.9				3-5 years	24(32)	75.0			
	More than 3 cycles	8(32)	25.0				Others (flexible)	4(32)	12.5	1		
	Others	6(32)	18.8					-				
Ecuador	2 cycles	6(13)	46.2	2.31	1.32		2 years	2(13)	15.4	2.00	0.71	
	More than 3 cycles	4(13)	30.8				3-5 years	10(13)	76.9	1		
	Others	3(13)	23.1				Others (flexible)	1(13)	<i>T.T</i>			
Venezuela	More than 3 cycles	17(21)	81.0	3.00	0.00		3-5 years	5	23.8	3.41	0.91	
							Others (flexible)	12	57.1			
Mexico	2 cycles	20(80)	25.0	3.24	1.31		2 years	10(80)	12.5	2.34	1.03	
	Others	59(80)	73.8				3-5 years	38(80)	47.5			
							Others (flexible)	16(80)	20.0			
Colombia	1 cycle	( <i>TT</i> )	9.1	2.81			(p).	I	I			
	2 cycles	10(77)	12.9									
	3 cycles	9( <i>TT</i> )	11.7									
	Others	16(77)	20.8									
Portugal	2 cycles	5(13)	38.5	2.85	1.52		3-5 years	13(13)	100.0	2.00	0.00	
	Others	8(13)	61.5									

Table 3.5 (continued)

(n°) Number of institutions per country (p) Missing values

institutions. Furthermore, most of the universities have an average of 2 cycles. For the countries marked 'others', most mentioned carrying out their first path in a formal strategic planning process. The countries with the highest number of institutions developing their first strategic planning programmes were Costa Rica, Paraguay and Ecuador. Portugal was similar in that most public HEIs indicated completing only one cycle, also suggesting the recent use of the strategic plan by these institutions. The countries with the most experience in planning were El Salvador, Mexico, Spain, Venezuela and Peru given the number of HEIs carrying out more planning cycles.

For the timeframe of strategy formulation, on average, the HEIs report planning within 3–5 years, but there are cases, which present a broader timeframe (between 6 and 8 years). The countries that diverge most from the overall mean were Paraguay, Costa Rica and Uruguay with an average of 4, meaning these institutions have considered different timeframes but still fit within the two previous broader horizons (between 3 and 5/between 6 and 8). Furthermore, the emergence of short horizon planning was more evident in Panama but also in countries such as Peru, El Salvador, Ecuador, Argentina and Mexico. On the other extreme, Costa Rica, Venezuela, Mexico and Panama reported periods of up to 8 years. In the cases of Mexico and Panama, these countries had trends in both short and long planning timeframes.

Ensuring a robust analysis, the response rate reached an average of 83.46 %. Individually, Chile, Peru and Bolivia had less participation with 33, 66.6 and 28.5 %, respectively. The rest of the countries exceeded 70 %. Lastly, this overview analysis suggests an average of 3–5 years for planning timeframe.

## 3.4.1.5 Degree of Professionalisation in Management and the Role of External Consultancies

Generally, the involvement of members from outside the university community in the formulation of strategy has occurred in the initial planning cycles, gradually decreasing as the continuity of the plans is established. Meanwhile, the need for external consultancies is generated by the governance features of HEIs. According to the comments provided by the institutions, changes in leadership teams highlight the need for more training for the academic staff taking on these management roles and the need for external consultancies. The countries that generally used a higher degree of these consultancy services were El Salvador and Colombia (Table 3.6).

Given the overall mean of this variable, the average use of external consultancy is moderate around 3. Furthermore, the universities do not count higher levels of professionalisation of their internal staff. If we analyse this value by country, the institutions reporting high external consultancy were Chile, Peru, El Salvador and Portugal. If we analyse the deviations of each country, the responses are heterogeneous and the values relatively high, i.e. more variable answers. Bolivia and Portugal

	Use of external consultancy							
Country	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$			
Spain	38(54)	70.4	2.47	1.95	3.00			
Paraguay	6(6)	100.0	2.33	2.06				
Costa Rica	12(12)	100.0	2.66	2.06				
Uruguay	7(7)	100.0	2.14	1.95				
Chile	18(18)	100.0	3.00	2.06				
Argentina	13(14)	92.9	1.61	1.50				
Bolivia	22(27)	81.5	1.72	0.98				
Panama	27(27)	100.0	2.07	1.43				
Peru	14(14)	100.0	3.07	1.14				
El Salvador	31(32)	96.9	3.80	1.17				
Ecuador	13(13)	100.0	2.69	1.31				
Venezuela	12(21)	57.00	5.00	0.00				
Mexico	45(80)	56.00	4.26	0.73				
Colombia	77(77)	100.0	5.00	0.00				
Portugal	13(13)	100.0	3.31	0.85				

 Table 3.6
 Professionalisation degree and use of external consultancy

(n°) Number of institutions per country

(p) Missing values

were more homogeneous with deviations below 1. In this case, the responses of universities were more similar and hence there is greater consistency between institutions on the use of external consultancy. These findings are supported by the high degree of responsiveness of institutions in most countries.

The qualitative comments revealed that the institutions in El Salvador heavily used external consultancy participation to support strategy formulation more common among specialised institutes as they have advanced less in the formality of planning processes. In the case of Venezuela, the institutions that counted more external support from a specialised consultancy were the private universities. On the other hand, the case of Portugal reveals institutions had a lower degree of professionalisation, due to the level of participation of external consultants, and was more prominent among universities than within the institutes, according to qualitative comments provided.

#### **3.4.1.6** Elements of the Institutional Strategy (Primary Elements)

The analysis of institutional strategy formulation was aimed at determining whether the HEIs surveyed in the various countries include the necessary elements to formulate an effective strategy such as questioning the very principles of the institution when it comes to defining their mission, a vision that implies a challenge for the future, values, internal and external diagnostics, strategic objectives, action plans and leadership roles, etc. With respect to the formal elements of strategy formulation, HEIs claim to include in a very significant percentage (Table 3.7) the definition of 'what are we and where are we going?' (mission, vision and values) when formulating their strategy.

	Mission				Values						
Country	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$	
Spain	53(54)	98.1	4.09	1.54	4.44	53(54)	98.1	3.79	1.42	4.36	
Paraguay	6(6)	100.0	4.33	1.03	1	6(6)	100.0	4.33	1.03	1	
Costa Rica	12(12)	100.0	5.00	0.00		12(12)	100.0	4.83	0.58		
Uruguay	7(7)	100.0	4.71	0.76	]	7(p)	-	-	-		
Chile	18(18)	100.0	5.00	0.00	]	17(18)	94.4	5.00	0.00		
Argentina	14(14)	100.0	3.86	1.10		14(14)	100.0	3.71	1.38		
Bolivia	27(27)	100.0	3.96	1.34	1	27(27)	100.0	4.26	1.06		
Panama	27(27)	100.0	3.96	1.09		27(27)	100.0	3.96	1.09		
Peru	14(14)	100.0	4.36	0.74	1	14(14)	100.0	4.00	0.88	1	
El Salvador	30(32)	93.8	4.30	0.47		29(32)	90.6	4.28	0.45		
Ecuador	13(p)	-	-	-		13(p)	-	-	-		
Venezuela	14(21)	66.7	4.21	0.43	]	15(21)	71.4	4.13	0.35		
Mexico	78(80)	97.5	4.86	0.35		71(80)	88.8	4.90	0.30		
Colombia	58(77)	76.0	5.00	0.00	1	49(77)	64 %	5.00	0.00		
Portugal	13(13)	100.0	4.54	0.52		13(13)	100.0	4.54	0.52		
	Vision					SWOT analysis					
Country	F	%	$\mu_{\rm i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$	
Spain	53(54)	98.1	3.91	1.47	4.39	53(54)	98.1	4.65	0.68	3.51	
Paraguay	6(6)	100.0	4.33	1.03		4(6)	66.7	5.00	0.00		
Costa Rica	12(12)	100.0	4.83	0.58		10(12)	83.3	5.00	0.00		
Uruguay	7(7)	100.0	4.57	0.79		4(7)	57.1	1.00	0.00		
Chile	16(18)	88.9	5.00	0.00		15(18)	83.3	5.00	0.00		
Argentina	14(14)	100.0	3.93	1.14		10(14)	71.4	1.30	0.48		
Bolivia	27(27)	100.0	3.78	0.80		23(27)	85.2	5.00	0.00		
Panama	27(27)	100.0	3.96	1.09		21(27)	77.8	5.00	0.00		
Peru	14(14)	100.0	4.14	0.66	]	9(14)	64.3	3.51	1.01		
El Salvador	30(32)	93.8	4.30	0.47		28(32)	87.5	5.00	0.00		
Ecuador	13(p)	-	-	-		13(p)	-	-	-		
Venezuela	14(21)	66.7	4.36	0.50		14(21)	66.7	1.86	0.36		
Mexico	78(80)	97.5	4.86	0.35		69	86.3	1.97	0.17		
Colombia	55(77)	71.00	5.00	0.00		77(p)	-	-	-		
Portugal	13(13)	100.0	4.54	0.52		13(13)	100	1.00	0.00		

Table 3.7 Trends in the incorporation of primary institutional strategy elements

(continued)

	Strategic axes					Strategic objectives				
Country	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$
Spain	53(54)	98.1	3.55	1.54	4.41	53(54)	98.1	4.26	1.26	4.44
Paraguay	6(6)	100.0	5.00	0.00		6(6)	100.0	5.00	0.00	
Costa Rica	12(12)	100.0	4.58	1.00		12(12)	100.0	4.58	1.00	
Uruguay	7(p)	-	-	-		7(7)	100.0	4.71	0.49	
Chile	15(18)	83.3	5.00	0.00		15(18)	83.3	5.00	0.00	
Argentina	14(14)	100.0	3.79	1.31		14(14)	100.0	3.79	1.31	
Bolivia	27(27)	100.0	4.33	1.07		27(27)	100.0	4.52	1.09	
Panama	27(27)	100.0	3.96	1.09		27(27)	100.0	3.96	1.09	
Peru	14(p)	-	-	-		14(14)	100.0	4.00	0.88	
El Salvador	28(32)	87.5	4.25	0.44		28(32)	87.5	4.25	0.44	
Ecuador	13(p)	-	-	-		13(p)	-	-	-	
Venezuela	15(21)	71.4	4.33	0.49		15(21)	71.4	4.33	0.49	
Mexico	75(80)	93.8	4.77	0.42		80(80)	100.0	4.77	0.42	
Colombia	61(77)	79.00	5.00	0.00		58(77)	76.00	5.00	0.00	
Portugal	13(p)	-	-	-		13(13)	100.0	4.08	0.28	

 Table 3.7 (continued)

(n°) Number of institutions per country

(p) Missing values

The results are very similar. In terms of the techniques for strategic analysis and the formalisation of the action plan, which is rolled out in a series of defined objectives, strategic pillars and goals, there is a significant percentage of HEIs that include these elements. With regard to the tools supporting the strategic analysis, the SWOT analysis is suggested to be the less employed element, evidenced by an overall average of 3.51. In Uruguay, Argentina, Venezuela, Mexico and Portugal, the mean does not exceed 2, suggesting that a low number of institutions use this tool to support the development of their institutional strategy.

The rest of the elements that comprise this variable present very similar results, both in mean values as well as in the values taken as the average response rates. Finally, the strategic axes represent one of the lowest shares if we consider the missing values of Uruguay, Peru, Ecuador, Colombia and Portugal. Concerning the rest of the elements, the tools are used proportionately in the same way between the institutions of the countries surveyed, except the case of SWOT, which is stated as the least used.

Although these overall percentages are high, it is particularly striking that the mission and vision are not considered by some institutions, which raises doubts about the quality of the processes conducted. This is the case in countries such as Ecuador, Venezuela or Colombia where some institutions give less priority to this element. If we specifically observe the 'mission' element, the data are very clear. The average value of 4.4 may suggest that most institutions across the countries

have included this philosophical element into their institutional strategy. This can be better observed if we analyse the individual means which do not fall below 3.8. The uniformity between institutions can be evidenced by the relatively small standard deviation values.

## 3.4.1.7 Elements of the Institutional Strategy (Sociological and Structural)

With respect to considerations of sociological and structural elements that constitute the institutional context, the overall analysis shown in Table 3.8 reveals a similar level of inclusion of these elements supported by the values ranging between 3.75 and 4.32.

Examining the variables closely, the distribution of responsibilities and leadership is recognised as an element of the structure supporting the strategy; also, according to the standard deviation, the degree of convergence between the institutions is high. Within the table, we may observe the case of Panama, which presents a 0.5 deviation, suggesting institutions diverge most concerning the distribution of responsibilities. Concerning the use of technologies and supporting structures, the response rates are higher, presenting an average of up to 90 %. Concerning the uniformity of responses and standard deviation values, there is heterogeneity of results, specifically visible in the cases of Spain, Paraguay and Panama.

Furthermore, a closer look at the 'leadership' aspect reveals it is considered in most contexts, with the exception of Ecuador, Colombia and Paraguay, and the participation responses of some countries were relatively insufficient to provide evidence of the consideration of this element as an important aspect of their strategy development, as in the cases of Spain and Mexico. At the same time, we can see that in most countries these sociological and structural elements are included less often than the formal elements (vision, mission and values) taken into account in the strategy formulation process. This reflects an imbalance in many contexts between the main elements of the strategy and those that provide a complementary structure, whether physical (i.e. reporting systems) or social (i.e. leadership). Also, elements that constitute the organisational structure of support which lay the groundwork for subsequently implementing the formulated strategy are not covered with the same intensity in several contexts, and there were countries where institutions did not mention this element (El Salvador, Ecuador and Colombia).

#### 3.4.1.8 Elements of the Institutional Strategy (Control)

Regarding the inclusion of control elements, universities were asked if they foresee in their strategy programmes monitoring components exerting some control over the strategy advancements gathering feedback on the process. The descriptive table shows that almost all the universities answered affirmatively for the inclusion of monitoring mechanisms (Table 3.9).

	Distribution of responsibilities				Leadership					
Country	F					F	0%		6	
Crain	52(54)	00.1	$\mu_i$	1.59	<sup>µ</sup> Total	2(54)	56	$\mu_i$		<sup>µ</sup> Total
<u>Spain</u>	55(54)	98.1	3.00	1.38	4.20	3(34)	3.0	5.00	0.00	4.52
Paraguay Casta Disa	0(0)	100.0	4.55	1.05	_	2(0)	33.3	5.00	0.00	-
Costa Rica	12(12)	100.0	4.67	0.78	_	10(12)	83.3	5.00	0.00	-
Uruguay	7(p)	-	-	-	_	4(7)	57.1	4.00	0.00	-
Chile	16(18)	88.9	4.00	0.00	_	15(18)	83.3	3.00	0.00	-
Argentina	14(14)	100.0	3.78	0.80		10(14)	71.4	4.00	0.00	-
Bolivia	16(27)	61.00	5.00	0.00		23(27)	85.2	4.22	0.42	
Panama	27(27)	100.0	3.63	1.21		21(27)	77.8	4.43	0.50	
Peru	14(14)	100.0	3.21	0.89		9(14)	64.3	4.00	0.00	
El Salvador	23(32)	71.9	4.35	0.49		28(32)	87.5	4.21	0.42	
Ecuador	13(p)	-	-	-		13(p)	-	-	-	
Venezuela	16(21)	76.2	4.19	0.40		15(21)	71.4	4.00	0.00	
Mexico	43(80)	53.00	4.55	0.50	1	25(80)	31.3	5.02	0.24	1
Colombia	53(77)	69.00	5.00	0.00	1	77(p)	-	-	-	
Portugal	13(13)	100.0	4.08	0.28		13(p)	-	-	_	1
	Use of I	СТ				Supporting structures				
Country	F	%	$\mu_{i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$
Spain	53(54)	98.1	2.94	1.46	3.9	53(54)	98.1	2.75	1.39	3.75
Paraguay	6(6)	100.0	4.33	1.03		6(6)	100.0	4.00	1.10	
Costa Rica	12(12)	100.0	4.83	0.58		12(12)	100.0	2.42	0.67	-
Uruguay	7(7)	100.0	3.86	0.69		7(7)	100.0	4.86	0.38	
Chile	14(18)	77.8	4.00	0.00	1	13(18)	72.2	4.00	0.00	1
Argentina	14(14)	100.0	3.00	0.96		14(14)	100.0	2.86	0.86	
Bolivia	19(27)	70.4	4.36	0.50	1	17(27)	63.0	5.00	0.00	1
Panama	27(27)	100.0	3.37	1.39	1	27(27)	100.0	3.81	1.21	1
Peru	14(14)	100.0	3.07	1.00	1	14(14)	100.0	2.64	1.01	1
El Salvador	17(32)	53.1	4.29	0.47	1	32(p)	-	-	-	1
Ecuador	13(p)	-	-	-		13(p)	-	-	-	
Venezuela	12(21)	57.1	4.17	0.39	1	10(21)	47.6	4.20	0.42	1
Mexico	68(80)	85.0	4.43	0.50	1	59(80)	73.8	4.42	0.50	1
Colombia	77(p)	-	-	-	1	77(p)	-	-	-	1
Portugal	13(13)	100.0	3.62	0.65	1	13(13)	100.0	4.08	0.28	1

Table 3.8 Trends in the incorporation of sociological and structural institutional strategy elements

(n°) Number of institutions per country

(p) Missing values

Spain, Paraguay, Argentina, Panama and Peru had a higher dissimilarity of responses with the mean value below 4. Venezuela presented the lowest percentage of participation when assessing this variable. Ecuador and Colombia only provided qualitative comments when assessing these elements. Specifically in the case of Colombia, planning systems follow the trends of the other countries analysed; they comprise the mission, vision, objectives and strategies, including the setting of

	Economic impact data					Monitoring mechanisms				
Country	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$
Spain	51(54)	94.44	3.27	1.48	3.77	53(54)	98.15	3.55	1.62	3.86
Uruguay	6(6)	100.00	2.83	1.17		6(6)	100.00	3.17	0.98	
Costa Rica	12(12)	100.00	4.58	1.00		12(12)	100.00	4.83	0.58	
Paraguay	7(7)	100.00	4.57	0.53		7(7)	100.00	3.14	1.46	
Chile	14(18)	77.78	4.00	0.00		16(18)	88.89	4.00	0.00	
Argentina	14(14)	100.00	3.29	0.99		14(14)	100.00	3.00	1.04	
Bolivia	17(27)	62.96	4.00	0.00		21(27)	77.78	4.52	0.51	
Panama	27(27)	100.00	3.48	1.48	_	27(27)	100.00	3.70	1.41	
Peru	14(14)	100.00	2.93	1.14		14(14)	100.00	3.07	1.14	
El Salvador	9(32)	28.13	4.33	5.00		24(32)	75.00	4.38	0.49	
Ecuador	13(p)	-	_	-		13(p)	-	_	-	1
Venezuela	6(21)	28.57	4.17	0.41		9(21)	42.86	4.22	0.44	
Mexico	59(80)	73.75	4.42	0.50		68(80)	85.00	4.56	0.50	
Colombia	77(p)	-	-	-	1	77(p)	-	-	-	1
Portugal	12(13)	92.31	3.15	0.55		12(13)	92.31	4.08	0.28	1

Table 3.9 Trends in the incorporation of strategy control mechanisms

(n°) Number of institutions per country

(p) Missing values

goals and indicators. In the case of Ecuadorian universities, they make very little use of the balanced scorecard, although on most occasions consideration is given to the use of performance indicators, as well as the inclusion of strategic pillars normally linked to the four main areas laid down in the institutional self-evaluation: academic, research, ties with the community and institutional management.

Moreover, the economic impact that universities were willing to measure and to what extent the economic impact data were taken into account to measure the strategy advancement were assessed. For financial aspects, Ecuador and Colombia did not provide data for this item, and there were some slight disparities of responses. Countries that took it most into account were Paraguay, Chile, Bolivia and Mexico with a mean value above 4. In the rest of the countries, the dissimilarity of responses among institutions was higher making it difficult to draw a clear pattern.

#### 3.4.1.9 Tools and Techniques Used for Strategic Analysis and Strategic Choices

Another element that helps clarify how the process of strategic management is carried out involves the identification of tools and techniques used by the various HEIs to formulate their strategy. Given that the process of gathering and analysing
information for strategic decision-making is a major undertaking, the real challenge is integrating and organising the data for effective and efficient analysis. Reviewing the overall analysis of the tools and techniques used by the institutions (Table 3.10), trends in the use of tools emerge according to the level of importance given by the institutions based on the mean value. However, the particular cases of the balance scorecard, the indicator systems, the critical success factor analysis and the

	SWOT an	nalysis				Market r	esearch			
Country	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$
Spain	39(54)	72.22	5.00	0.00	4.17	39(54)	72.22	2.62	1.73	3.58
Paraguay	6(6)	100.00	4.33	1.03	1	6(6)	100.00	2.83	1.17	
Costa Rica	12(12)	100.00	4.33	1.56	1	12(12)	100.00	3.83	1.75	-
Uruguay	7(7)	100.00	3.71	1.60	1	7(7)	100.00	4.43	1.51	
Chile	17(18)	94.44	4.59	0.51	1	18(p)	-			1
Argentina	14(14)	100.00	3.29	1.64		14(14)	100.00	2.43	1.22	
Bolivia	27(27)	100.00	4.15	0.66	1	27(27)	100.00	3.56	1.22	1
Panama	27(27)	100.00	3.85	1.17		27(27)	100.00	3.44	1.48	
Peru	14(14)	100.00	4.29	0.47		14(14)	100.00	2.86	1.35	
El Salvador	28(32)	87.50	4.43	0.50		19(32)	59.38	4.26	0.45	
Ecuador	13(13)	100.00	4.15	0.69		4(13)	30.77	4.25	0.50	
Venezuela	17(21)	80.95	4.35	0.49	1	18(21)	85.71	4.33	0.58	1
Mexico	67(80)	83.75	4.40	0.49		48(80)	60.00	4.38	0.49	
Portugal	13(13)	100.00	3.54	0.52	1	13(13)	100.00	3.31	0.85	1
	Balance s	scorecard				Strategic	e maps			
Country	F	%	$\mu_{\mathrm{i}}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$
Spain	38(54)	70.37	3.82	1.72	2.39	38(54)	70.37	3.13	1.71	3.46
Paraguay	6(6)	100.00	2.50	0.55		6(6)	100.00	2.33	0.82	
Costa Rica	12(12)	100.00	1.67	0.65		12(12)	100.00	4.17	1.59	
Uruguay	7(7)	100.00	1.57	0.53	1	7(7)	100.00	1.57	1.51	1
Chile	18(p)	-				8(18)	44.44	4.50	0.53	
Argentina	14(p)	-			1	14(14)	100.00	2.07	1.33	
Bolivia	27(p)	-				27(27)	100.00	3.70	0.82	
Panama	27(p)	-				27(27)	100.00	3.19	1.33	
Peru	14(p)	-			1	14(14)	100.00	2.93	0.92	
El Salvador	32(p)	-				9(32)	28.13	4.56	0.53	
Ecuador	13(p)	-				2(13)	15.38	4.50	0.71	
Venezuela	21(p)	-				1(21)	4.76	4.00	0.00	
Mexico	80(p)	-			]	44(80)	55.00	4.34	0.48	
Portugal	13(p)	-				13(13)	100.00	3.46	0.52	

Table 3.10 Trends in tools and techniques used to formulate the institutional strategy

(continued)

	Stakehol	ders' analy	/sis			Scenario	building			
Country	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$
Spain	39(54)	72.22	3.44	1.76	2.86	38(54)	70.37	2.08	1.19	3.73
Paraguay	6(6)	100.00	2.50	0.84	_	6(6)	100.00	5.00	0.00	_
Costa Rica	12(12)	100.00	1.92	0.79	1	12(12)	100.00	4.33	1.56	
Uruguay	7(7)	100.00	3.00	0.00		7(7)	100.00	4.43	1.51	
Chile	18(p)	-				10(18)	55.56	4.30	0.48	
Argentina	14(p)	-				14(14)	100.00	2.29	1.20	
Bolivia	27(p)	-				27(27)	100.00	3.63	0.69	
Panama	27(p)	-			1	27(27)	100.00	3.07	1.41	1
Peru	14(p)	-			_	14(14)	100.00	2.79	0.89	_
El Salvador	32(p)	-			1	11(32)	34.38	4.27	0.47	
Ecuador	13(p)	-				5(13)	38.46	4.40	0.55	
Venezuela	21(p)	-				14(219	66.67	4.43	0.53	
Mexico	80(p)	-				58(80)	72.50	4.31	0.47	
Portugal	13(13)	-				13(13)	100.00	2.85	0.55	
	Critical s	uccess fac	tor ana	lysis		Competi	tive positi	oning a	analysis	8
Country	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$
Spain	39(54)	72.22	2.79	1.63	2.51	38(54)	70.37	2.97	1.67	2.60
Paraguay	6(6)	100.00	2.33	0.82		6(6)	100.00	2.50	0.84	
Costa Rica	12(12)	100.00	1.92	0.90		12(12)	100.00	1.92	0.79	
Uruguav	7(7)	100.00	3.00	0.00		7(7)	100.00	3.00	0.00	

Table 3.10 (continued)

(p) Missing values

stakeholder analysis coupled with missing values make it difficult to achieve robust results, therefore restricting overall strong comparative conclusions.

Despite this, the tools can be arranged into two groups: on the one hand, those with an overall average of less than 3 and, on the other, those equal to three or above. Thus, this clustering revealed that the first group (mean > 3) is formed by the tools most valued by universities: the SWOT analysis, market research, strategic maps and building scenarios. In the second group, the tools less employed were the balance scorecard, the critical success factor analysis, the stakeholder analysis and the competitive positioning analysis. It is important to observe that this group of tools had a lower rate of response; therefore, due to the fact that most institutions did not value these specific tools, we may not be able to ensure that these tools are not really used in the region; however, it is possible to argue that considering the institutions that have participated in the study, this second group of tools were considered less important.

For the first group of tools (SWOT analysis, market research, strategic maps and building scenarios), we may suggest that these tools are the most used across the countries with the fewest missing values and highest response rates. Specifically, in Chile and Colombia, higher missing values were seen. Overall, if we examine in detail the degree of uniformity of the responses according to their standard deviation, in the case of the SWOT analysis, there were countries whose institutions have been very consistent in their responses, as the standard deviation was very small (between 0 and 0.69): Spain, Chile, Bolivia, El Salvador, Ecuador, Venezuela, Mexico and Portugal. On the other hand, the rest of the countries were less uniform with standard deviations above 1. In this respect, we can say that Spain was the most consistent with a deviation of 0 implying that all Spanish institutions responded with option 5, indicating higher importance for the use of SWOT analysis. For the use of market analysis, similar outcomes are noted along with some countries maintaining uniformity regardless of the analysed tools (SWOT or market analyses): El Salvador, Ecuador, Venezuela, Mexico and Portugal.

In the case of Ecuador, although not detailed in the quantitative analysis, some qualitative comments revealed the use of other tools such as the logical framework approach and the theory of constraints. We also see that the use of more customised tools to define a vision for the future, such as the development of strategy maps (to document goals for the future and define an action plan focusing on the adaptation of processes and resources) and scenario building (to evaluate the strategic alternatives used to predict the future evolution of the institution and its environment depending on the path taken) are less frequently used tools. Other tools, such as structural analysis of an industry or value chain analysis (to gain insight into what the core business is and enable repositioning), were not observed as alternatives or used to complement those previously discussed.

#### 3.4.1.10 Leadership and Participation in the Process

According to the results of previous case studies in HEIs, the strategy formulation phase should generally be a participatory process with the majority of the organisation involved. In certain respects, participation in the process of strategy development and deployment is a key to facilitating the subsequent implementation of that strategy. This topic deserves further reflection, given that much of the criticism surrounding strategic planning has to do with the rigidity and slowness of the processes. Depending on the structure or organisation type, achieving a significant impact on the participation of all staff (or at least the key agents) requires an increased bureaucratisation and duration of the process, in contrast to the dynamisation that the future vision planning should include. Therefore, when it comes to defining institutional priorities and implementing best practices in governance and the system of incentives for the organisation, the leadership of the vice chancellor is suggested as a critical success factor in the strategic plans of institutions. These conditions are especially important for implementing the formulated strategy particularly when managing the organisational change; otherwise, there would be a risk of the executive bodies and the university community not being engaged with the actions required (Cáceres 2007).

In this respect, as shown in Tables 3.11 and 3.12, strategy and interlinking of the strategic plan by selecting approaches, models and techniques are carried out mostly by the shared leadership of the vice chancellors and top management teams (TMT),

	Top mar	nagemen	t team			Council	of gover	mment		
Country	F	%	$\mu_{ m i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$
Spain	39(54)	72.2	4.77	.485	4.3	39(54)	72.2	4.56	.598	4.1
Paraguay	2(6)	33.3	5.0	0.0		1(6)	16.7	5.0	0.0	
Costa Rica	12(12)	100.0	4.33	.985		12(12)	100.0	3.67	.985	
Uruguay	7(7)	100.0	4.29	1.496		7(7)	100.0	4.00	1.528	
Chile	18(18)	100.0	4.72	.461		2(18)	11.1	5.00	0.000	
Argentina	14(14)	100.0	3.86	.949		14(14)	100.0	3.21	1.311	
Bolivia	27(27)	100.0	4.11	.751		27(27)	100.0	4.22	.934	
Panama	6(27)	14.8	4.33	.516		27(p)	-	-	-	
Peru	14(14)	100.0	3.57	.756		14(p)	-	-	-	
El Salvador	23(32)	71.9	4.48	.511		20(32)	62.5	4.30	.470	
Ecuador	7(13)	53.8	5.00	0.000		13(13)	100.0	4.54	.519	
Venezuela	9(21)	42.9	4.44	.527		21(p)	-	-	-	
Portugal	13(13)	100.0	3.15	2.075		13(13)	100.0	2.38	.650	
	General	manager	•			Social c	ouncil			
Country	F	%	$\mu_{ m i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$
Spain	38(54)	70.4	3.53	.979	3.1	39(54)	72.2	4.21	1.056	3.2
Uruguay	7(7)	-	-	-		7(7)	100.0	4.29	1.113	
Argentina	14(14)	100.0	2.50	1.454		14(14)	100.0	2.07	.997	
Bolivia	27(p)	-	-	-		27	100.0	3.37	.492	
Peru	14(14)	100.0	3.36	.633		14(14)	100.0	3.14	.535	
Portugal	13(p)	-	-	-		13(13)	100.0	2.38	.650	

Table 3.11 Trends in formulation of strategy leadership

while the role of other actors in different contexts may vary. In the table, for other variables analysed, only countries that provided responses are included.

Observing the analysed variables, TMT and the council of government presented approximately the same mean: 4.3 and 4.1, respectively. This might suggest that the leadership in the process of strategy formulation across these different countries is mostly in charge of the top level. In the specific case of TMT, Paraguay and Ecuador have a deviation of 0 indicating that institutions provide the same answer to this question. On the contrary, Uruguay and Portugal yielded less uniformity of responses. As for the second item (council of government), Paraguay and Chile had a standard deviation of 0, while at the other end, Uruguay and Argentina had less uniformity of responses. The other countries for the two examined items presented similar values.

Concerning the other two items, general manager and social council, similar results were also observed, except in the case of mean values; the answers were less conclusive because the values ranged between 3.1 and 3.2. This might indicate that these groups of people (technical and more external driven profiles) take a less clear role in leading the process of defining the strategy. We have to note that these values have been calculated for fewer countries as compared with TMT and council of government variables, and therefore under normal responses (all institutions respond to the answer), these values could vary positively or negatively. For this reason, we cannot be conclusive given the missing values.

		$\mu_{\mathrm{Total}}$	3.41							$\mu_{\mathrm{Total}}$	4.03					
		$\sigma_{\rm i}$	.966		1.357	1.512	.826			$\sigma_{\rm i}$	606.				699.	
	ative staff	$\mu_{\rm i}$	3.26		3.25	3.43	3.72		anager	$\mu_{\rm i}$	4.34				3.72	
	Administr	%	72.2		100.0	100.0	100.0		General m	%	70.4				100.0	
		$\mu_{\mathrm{Total}}$	3.98							$\mu_{\mathrm{Total}}$	3.96					
		$\sigma_{\rm i}$	.933	0.000	1.168	.976	.786	.483		$\sigma_{\rm i}$	1.079	0				.488
		$\mu_{\rm i}$	3.32	5.00	3.50	3.57	4.17	4.30	mmunities	$\mu_{\rm i}$	2.58	5.00				4.29
	Faculty	%	70.4	50.0	100.0	100.0	100.0	76.9	External co	%	66.7	100.0				53.8
mulation		$\mu_{\mathrm{Total}}$	3.11							$\mu_{\mathrm{Total}}$	3.63					
ion in its for		$\sigma_{\rm i}$	1.214							$\sigma_{\rm i}$	1.079	0.000	1.545	1.414	.840	.535
sy participat	cil	$\mu_{\rm i}$	3.11							$\mu_{\rm i}$	2.61	5.00	2.75	3.00	4.00	4.43
ids in strateg	Social coun	%	66.7	100.0	100.0	100.0	100.0	100.0	Students	%	70.4	66.7	100.0	100.0	100.0	53.8
Table 3.12 Trei		Country	Spain	Paraguay	Costa Rica	Uruguay	Chile	Ecuador		Country	Spain	Paraguay	Costa Rica	Uruguay	Chile	Ecuador

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	Table 3.12

	Executive t	team			Governme	nt council			Others			
Country	$c_0^{\prime \prime}$	$\mu_{i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$
Spain	72.2	4.72	.510	4.58	70.4	3.55	.978	4.04				
Paraguay	100.0	5.00	0.000									
Costa Rica												
Uruguay	100.0	4.29	1.496		100.0	4.29	.756					
Chile	100.0	4.44	.705		100.0	4.28	699.					
Ecuador	100.0	4.46	.519									
Argentina									21.4	5.00	0.000	4.30
Bolivia									33.3	4.00	0.000	
Panama									14.8	4.00	0.000	
Peru									42.9	4.33	.516	
El Salvador									46.9	4.20	.414	
Venezuela									52.4	4.55	.522	
0 1 1 10 V0 /												

(n°) Number of institutions per country(p) Missing values

3 Trends and Dynamics of Strategic University Management...

Meanwhile, examining the level of participation by different members of the university community, we see little involvement by other actors. However, it is important to highlight that there was a large number of countries whose institutions did not respond. Accordingly, drawing upon the countries that provided data, in all cases, the average exceeds the value of 3 indicating that institutions agree, strongly agree or totally agree that these groups participate in the strategy formulation. Among the actors that received higher assessments were the executive team, the government council and the general managers rated with averages of 4.58, 4.04 and 4.03. The participation levels among middle managers, deans, academics, administration and service staff, students, alumni and external agents were not highly considered, as no specific data was collected on the percentage and level of participation of all the different groups outside the upper level. This would suggest that 'thinking' about the strategy is intrinsically tied to the senior management of HEIs, although middle managers are included for implementation.

The data analysed here once again underlines the complexity of the issue of participation in the strategy formulation process, where the challenge revolves around identifying the maximum degree of involvement that must be achieved to reach a strategic consensus about the strategy formulated by senior management in order to be a reference for all activities determining the necessary level of involvement of the external community through representation in decision-making bodies of the HEIs' organisational structure. The participation aspect brings up another element involving how to get people to have a shared vision of the fundamental purposes defined in the strategy.

In this regard, some authors suggest that achieving participation in strategic planning – at least to the extent that the individuals would be responsible for reaching certain goals contained in the plan – is a decisive factor when designing the mechanisms for participation in the formulation process. This fact could be related to the particular nature of the governance model that dictates the type of academic leadership in management processes, as well as decision-making systems, which are mostly top-down due to the lack of data that ensures the participation of different actors in the strategy development phase.

As such, a balanced combination of key agents in the strategy formulation process, the participation of those responsible and the alignment of a shared vision might be a positive contribution to the improved governance of institutions. Indeed, according to the survey results, this aspect constitutes a challenge and an important aspect needing improvement in most countries.

#### 3.5 Strategic Implementation Process Variables

#### 3.5.1 Degree of Strategy Implementation

To gain more insight into strategy implementation in internal units (administrative and academic), the survey asked how the institutional strategy became operational. Two perspectives have been explored: on the one hand, the existence of strategy formulation at the level of units and, on the other, the scope of the implementation of the institutional corporate strategy at institutional levels. The feedback revealed that implementation of the institutional strategy in internal units as well as the existence of internal initiatives varies considerably from one country to the next, as well as within each country (Table 3.13).

	Strategy f initiatives	Strategy formulation institutional uinitiatives $F$ $\%$ $\mu_i$ $\sigma_i$					itutional s nalised at	trategy the uni	is not ts	
Country	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$
Spain	39(54)	72.2	1.82	0.389	1.35	37(54)	68.52	2.70	0.81	2.75
Paraguay	6(6)	100	1.53	0.516		6(p)	100.00	-	-	
Costa Rica	12(12)	100	1.15	0.09		12(p)	100.00	-	-	
Uruguay	7(p)	100	-	-		7(7)	100.00	3.57	0.98	
Chile	18(p)	100	-	-	1	18(p)	100.00	-	-	1
Argentina	14(p)	100	-	-		14(p)	100.00	-	-	
Bolivia	27(27)	100	1.14	0.093	1	27(p)	100.00	-	-	
Panama	5(27)	18.5	2	0		27(27)	100.00	5.00	0.00	1
Peru	7(14)	50	1.2	0		14(14)	100.00	1.00	0.00	]
El Salvador	25(32)	78.1	1.17	0.075		32(p)	100.00	-	-	
Ecuador	10(13)	76.9	1.2	0		13(p)	100.00	-	-	
Venezuela	17(21)	81	1.2	0		21(p)	100.00	-	-	1
Mexico	68(80)	85	1.2	0	-	80(p)	100.00	_	-	
Colombia	77(p)	100	-	-	1	77(p)	100.00	-	-	
Portugal	13	100	1.18	0.055	1	13(13)	100.00	1.46	0.52	
0						- ( - )			0.02	
	The instit at the leve	utional st el of some	rategy e units	is forma	lised	The inst formalis	itutional s ed at the l	strategy level of	is all the	units
Country	The instit at the leve F	utional st el of some %	rategy e units $\mu_i$	is forma $\sigma_{\rm i}$	lised $\mu_{\text{Total}}$	The inst formalis	itutional s ed at the 1 %	strategy level of $\mu_i$	is all the $\sigma_i$	units $\mu_{\text{Total}}$
Country Spain	The instit at the leve F 37(54)	utional st el of som % 68.52	rategy e units $\mu_i$ 3.84	is forma $\sigma_i$ 1.19	lised $\mu_{Total}$ 3.76	The inst formalis F 38(54)	itutional s ed at the % 70.37	strategy level of $\mu_i$ 3.61	is all the $\sigma_i$ 1.37	units $\mu_{\text{Total}}$ 4.06
Country Spain Paraguay	The instit at the leve <i>F</i> 37(54) 6(p)	utional st el of some % 68.52 100.00	rategy e units $\mu_i$ 3.84 -	is forma $\sigma_i$ 1.19 -	lised $\mu_{Total}$ 3.76	The inst formalis $F$ 38(54) 6(p)	itutional s ed at the % 70.37 100.00	strategy level of $\mu_i$ 3.61 -	is all the $\sigma_i$ 1.37	units $\mu_{Total}$ 4.06
Country Spain Paraguay Costa Rica	The instit at the level           F           37(54)           6(p)           12(p)	utional st el of some % 68.52 100.00 100.00	rategy e units $\mu_i$ 3.84 -	is forma σ <sub>i</sub> 1.19	lised $\mu_{Total}$ 3.76	F         38(54)           6(p)         12(p)	itutional s ed at the % 70.37 100.00 100.00	trategy level of $\mu_i$ 3.61 -	is all the $\sigma_i$ 1.37 -	units $\mu_{\text{Total}}$ 4.06
Country Spain Paraguay Costa Rica Uruguay	The instit at the leve <i>F</i> 37(54) 6(p) 12(p) 7(7)	utional st el of somo % 68.52 100.00 100.00 100.00	rategy e units $\mu_i$ 3.84 - - 5.00	is forma σ <sub>i</sub> 1.19 - - 0.00	lised $\mu_{Total}$ 3.76	F         38(54)           6(p)         12(p)           2(7)         2(7)	itutional s ed at the % 70.37 100.00 100.00 28.57	trategy level of $\mu_i$ 3.61 - 5.00	is all the $\sigma_i$ 1.37 - 0.00	units $\mu_{\text{Total}}$ 4.06
Country Spain Paraguay Costa Rica Uruguay Chile	The instit at the leve <i>F</i> 37(54) 6(p) 12(p) 7(7) 18(18)	utional st el of some % 68.52 100.00 100.00 100.00 100.00	rategy e units $\mu_i$ 3.84 - 5.00 4.00	is forma σ <sub>i</sub> 1.19 - 0.00 0.00	lised $\mu_{\text{Total}}$ 3.76	F         38(54)           6(p)         12(p)           2(7)         15(18)	itutional s ed at the % 70.37 100.00 100.00 28.57 83.33	strategy level of $\mu_i$ 3.61 - 5.00 4.47	$\sigma_{i}$ is all the $\sigma_{i}$ 1.37 - 0.00 0.52	units $\mu_{Total}$ 4.06
Country Spain Paraguay Costa Rica Uruguay Chile Argentina	The instit at the leve <i>F</i> 37(54) 6(p) 12(p) 7(7) 18(18) 14(p)	utional st el of some % 68.52 100.00 100.00 100.00 100.00 100.00	rategy e units $\mu_i$ 3.84 - - 5.00 4.00 -	is forma σ <sub>i</sub> 1.19 - 0.00 0.00 -	$\frac{\mu_{\text{Total}}}{3.76}$	F         38(54)           6(p)         12(p)           2(7)         15(18)           14(p)         14(p)	with the set of the s	strategy level of $\mu_i$ 3.61 - 5.00 4.47 -	$\sigma_{i}$ all the $\sigma_{i}$ 1.37 - 0.00 0.52 -	units $\mu_{\text{Total}}$ 4.06
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia	The instit at the leve <i>F</i> 37(54) 6(p) 12(p) 7(7) 18(18) 14(p) 27(p)	utional st           el of some           %           68.52           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00	rategy e units $\mu_i$ 3.84 - - 5.00 4.00 - -	σ <sub>i</sub> 1.19 - 0.00 0.00 - -	$\frac{\mu_{\text{Total}}}{3.76}$	F         38(54)           6(p)         12(p)           2(7)         15(18)           14(p)         27(p)	with the set of the s	trategy level of $\mu_i$ 3.61 - 5.00 4.47 -	$\sigma_{i}$ all the $\sigma_{i}$ 1.37 - - 0.00 0.52 - -	<u>μ<sub>Total</sub></u> 4.06
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama	The instit at the leve F 37(54) 6(p) 12(p) 7(7) 18(18) 14(p) 27(p) 13(27)	utional st el of some % 68.52 100.00 100.00 100.00 100.00 100.00 100.00 48.15	rategy e units $\mu_i$ 3.84 - 5.00 4.00 - - 3.54	σ <sub>i</sub> 1.19           -           0.00           0.00           -           0.00           0.66	lised $\mu_{Total}$ 3.76	The inst formalis <i>F</i> 38(54) 6(p) 12(p) 2(7) 15(18) 14(p) 27(p) 15(27)	with the set of the s	$ \begin{array}{c} \mu_{i} \\ \mu_{i} \\ 3.61 \\ - \\ 5.00 \\ 4.47 \\ - \\ 4.25 \\ \end{array} $	$\sigma_{i}$ all the $\sigma_{i}$ 1.37 - 0.00 0.52 - - 0.45	units <u>µ<sub>Total</sub></u> 4.06
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru	The instit at the leve F 37(54) 6(p) 12(p) 7(7) 18(18) 14(p) 27(p) 13(27) 13(14)	utional st el of some % 68.52 100.00 100.00 100.00 100.00 100.00 100.00 48.15 92.86	rategy e units $\mu_i$ 3.84 - - 5.00 4.00 - - 3.54 3.15	$\sigma_i$ 1.19 - 0.00 0.00 - 0.66 0.99	lised $\mu_{\text{Total}}$ 3.76	The inst formalis <i>F</i> 38(54) 6(p) 12(p) 2(7) 15(18) 14(p) 27(p) 15(27) 14(14)	with the set of the s	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 3.61 \\ - \\ - \\ 5.00 \\ 4.47 \\ - \\ 4.25 \\ 2.86 \end{array}$	$\sigma_{i}$ all the $\sigma_{i}$ 1.37 - 0.00 0.52 - 0.45 1.29	units <u> <u> <u> </u> <u> <u> </u> </u></u></u>
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador	The instit at the leve F 37(54) 6(p) 12(p) 7(7) 18(18) 14(p) 27(p) 13(27) 13(27) 13(14) 32(p)	witional state           of some           %           68.52           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           92.86           100.00	rategy e units $\mu_i$ 3.84 - - 5.00 4.00 - - 3.54 3.15 -	σ <sub>i</sub> 1.19           -           0.00           0.00           -           0.66           0.99	μ <sub>Total</sub> 3.76	The inst formalis <i>F</i> 38(54) 6(p) 12(p) 2(7) 15(18) 14(p) 27(p) 15(27) 14(14) 32(p)	with the set of the s	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 3.61 \\ - \\ - \\ 5.00 \\ 4.47 \\ - \\ 4.25 \\ 2.86 \\ - \end{array}$	$ \begin{array}{c} \text{is} \\ \text{is} \\ \text{all the} \\ \hline \sigma_i \\ \hline 1.37 \\ - \\ - \\ 0.00 \\ 0.52 \\ - \\ - \\ 0.45 \\ 1.29 \\ - \end{array} $	units $\mu_{\text{Total}}$ 4.06
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador	The instit at the leve <i>F</i> 37(54) 6(p) 12(p) 7(7) 18(18) 14(p) 27(p) 13(27) 13(14) 32(p) 13(p)	utional st           of some           %           68.52           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           48.15           92.86           100.00           100.00	rategy e units $\mu_i$ 3.84 - - 5.00 4.00 - - 3.54 3.15 - -	$\sigma_i$ 1.19 - 0.00 0.00 - 0.66 0.99 - -	lised $\mu_{Total}$ 3.76	The inst formalis           F           38(54)           6(p)           12(p)           2(7)           15(18)           14(p)           27(p)           15(27)           14(14)           32(p)           13(p)	with the set of the s	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 3.61 \\ - \\ - \\ 5.00 \\ 4.47 \\ - \\ 4.25 \\ 2.86 \\ - \\ - \\ - \\ - \end{array}$	$\sigma_{i}$ all the $\sigma_{i}$ 1.37 - - 0.00 0.52 - - 0.45 1.29 - -	units <u> <u> </u> <u> <u> </u> <u> </u></u></u>
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador Venezuela	The instit at the leve F 37(54) 6(p) 12(p) 7(7) 18(18) 14(p) 27(p) 13(27) 13(14) 32(p) 13(p) 21(p)	wtional st           el of some           %           68.52           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00	rategy e units $\mu_i$ 3.84 - - 5.00 4.00 - - 3.54 3.15 - - -	σ <sub>i</sub> 1.19           -           0.00           0.00           -           0.66           0.99           -           -           -	μ <sub>Total</sub> 3.76	The inst formalis           F           38(54)           6(p)           12(p)           2(7)           15(18)           14(p)           27(p)           15(27)           14(14)           32(p)           13(p)           21(p)	with the second secon	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 3.61 \\ - \\ - \\ 5.00 \\ 4.47 \\ - \\ 4.25 \\ 2.86 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ $	$ \begin{array}{c} \text{is} \\ \text{is} \\ \text{all the} \\ \hline \sigma_i \\ 1.37 \\ - \\ - \\ 0.00 \\ 0.52 \\ - \\ - \\ 0.45 \\ 1.29 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ $	units μ <sub>Total</sub> 4.06
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador Venezuela Mexico	The instit at the leve F 37(54) 6(p) 12(p) 7(7) 18(18) 14(p) 27(p) 13(27) 13(27) 13(14) 32(p) 13(p) 21(p) 80(p)	witional step           el of some           %           68.52           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00	rategy e units $\mu_i$ 3.84 - - 5.00 4.00 - - 3.54 3.15 - - - - -	σ <sub>i</sub> 1.19           -           0.00           0.00           -           0.66           0.99           -           -           -           -           -           0.66           0.99           -           -           -	lised $\mu_{Total}$ 3.76	The inst formalis           F           38(54)           6(p)           12(p)           2(7)           15(18)           14(p)           27(p)           15(27)           14(14)           32(p)           13(p)           21(p)           71(80)	with the second secon	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 3.61 \\ - \\ - \\ 5.00 \\ 4.47 \\ - \\ 4.25 \\ 2.86 \\ - \\ - \\ - \\ 4.32 \end{array}$	$\sigma_{i}$ all the $\sigma_{i}$ 1.37 - - 0.00 0.52 - - 0.45 1.29 - - - 0.45	units <u> <u> <u> </u> <u> <u> </u> </u></u></u>
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador Venezuela Mexico Colombia	The instit at the leve F 37(54) 6(p) 12(p) 7(7) 18(18) 14(p) 27(p) 13(27) 13(27) 13(14) 32(p) 13(p) 21(p) 80(p) 77(p)	utional st           el of some           %           68.52           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00	rategy e units $\mu_i$ 3.84 - - 5.00 4.00 - - 3.54 3.15 - - - - - - - - -	σ <sub>i</sub> 1.19           -           0.00           0.00           -           0.666           0.999           -      <	μ <sub>Total</sub> 3.76	The inst formalis           F           38(54)           6(p)           12(p)           2(7)           15(18)           14(p)           27(p)           15(27)           14(14)           32(p)           13(p)           21(p)           77(p)	with the second secon	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 3.61 \\ - \\ - \\ 5.00 \\ 4.47 \\ - \\ - \\ 4.25 \\ 2.86 \\ - \\ - \\ - \\ 4.32 \\ - \\ \end{array}$	$\sigma_{i}$ all the $\sigma_{i}$ 1.37 - - 0.00 0.52 - - 0.45 1.29 - - 0.45 1.29 - - 0.47 -	units µ <sub>Total</sub> 4.06

 Table 3.13
 Scope of strategy implementation

(n°) Number of institutions per country

(p) Missing values

Starting from the aspect of the deployment of the strategy level, that is, to what extent the strategy definition and elaboration goes further than the corporate level, and what is the breadth of internal initiatives across the countries, measured on a scale of 1 and 2, Spain and Panama (1.82 and 2) are the countries where the medium suggests that there were more institutions with a tendency for initiatives of developing the strategy in their units.

On the other hand, the overall mean suggests that across the countries there is a trend associated with a strategy formulation centred mostly at the institutional corporate level. However, the results concerning the rate of the institutional strategy deployment are diverse. From the total mean, we can discern two groups of variables that are below 3 and those above it. We should note that the participation rate for these variables was not consistent across the countries, which might restrict conclusions.

Nevertheless, if we do analyse the results of the trends in the institutional strategy deployment, we can verify that the countries achieving a higher degree of strategy formalisation in internal units are more evident in Chile, Spain and Panama. It would be interesting to analyse in greater depth what communication tools and specific methodologies were used in these settings to achieve a greater or lesser degree of formalisation within HEIs. The analysis is conducted on the following points related to the process of communication and methodologies applied.

#### 3.5.2 Communication Processes

In most studies, the aspect of communication involves strategy implementation and alignment, although it could be considered a universal component of the entire planning process. Communication is closely related to one of the strategy's social elements: leadership. Also needed is a set of triggers to make an impact on the members of the university community when it comes to communication. The use of these different triggers by the process leaders implies achieving an understanding and commitment on the part of the university community to step out of its current position, which is generally a comfortable one, and move towards a desired future situation.

Thus, for the process of conveying the institutional strategy, one important aspect to analyse is the degree of knowledge about the functions and responsibilities of individuals at the institution in relation to the fulfilment of the strategy. Table 3.14 shows the analysis concerning the degree of knowledge about the responsibilities and functions of the various agents involved in the strategy implementation process.

There is a very high response rate, with a minimum percentage of 62 % and a maximum of 100 % with an average response rate of nearly 92 %. Specifically, the countries acknowledging the functions and responsibilities were not well set and

	The roles an well underst	d responsibilities ood and assumed	s of individuals 1	within the institu	ution are
Country	F	%	$\mu_{i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$
Spain	39(54)	72.2	3.90	.552	3.9
Paraguay	6(p)	_	-	-	
Costa Rica	12(p)	_	_	_	
Uruguay	7(7)	100.0	4.00	.816	
Chile	18(18)	100.0	4.11	.758	
Argentina	12(14)	85.7	2.83	.835	
Bolivia	27(27)	100.0	3.89	.577	
Panama	27(27)	100.0	3.74	1.196	
Peru	14(14)	100.0	4.50	.535	
El Salvador	24(32)	75.0	4.29	.690	
Ecuador	13(p)	_	_	-	
Venezuela	13(21)	61.9	4.38	.506	
Mexico	66(80)	82.5	4.33	.475	
Colombia	77(p)	-	-	-	
Portugal	13(13)	100.0	2.54	.519	

Table 3.14 Degree of knowledge about the responsibilities and functions

(p) Missing values

understood when it comes to implementing the strategy were Argentina and Portugal, with a mean value inferior to the total mean average of 2.83 and 2.54, respectively. The rest of the countries presented a mean value above 3, which indicates that the institutions report the responsibilities and functions as well understood when preparing to implement the strategy. This is supported by the overall mean of 3.9. Regarding the uniformity of responses, there were countries in which institutions vary in their approach to this aspect, as was the case of Panama with a standard deviation of 1.196.

One important aspect in analysing this variable is to verify that there is an effective two-way communication process in place to ensure proper dissemination of the defined strategy, because if communication fails, it may be difficult to secure the commitment of stakeholders, which in turn makes it difficult to align the institutional efforts. Therefore, the study identified the existence of systematised processes of communication, and depicted in Table 3.15, not all countries provided explicit answers for this variable in the cases of Paraguay, Costa Rica, Argentina, Ecuador and Colombia.

In contrast, the response rate is very high for each country. With the exception of Venezuela at 38.1 %, in the rest of the countries, the average participation was above 70 %. The overall response rate is around 91 %. Together with a total mean of 3.8, the institutions report effective communication systems. The institutions providing responses to this variable mostly scored around 4, as the individual country mean

	Two-way co transmissior	mmunication pro	cess that allows within the institu	s and ensures the ation	;
Country	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$
Spain	39(54)	72.2	3.59	.818	3.8
Paraguay	6(p)	-			
Costa Rica	12(p)	-			
Uruguay	7(7)	100.0	4.00	1.000	
Chile	18(18)	100.0	4.11	.832	
Argentina	14(p)	-			
Bolivia	27(27)	100.0	3.04	1.480	
Panama	27(27)	100.0	3.70	1.103	
Peru	14(14)	100.0	3.00	.877	
El Salvador	25(32)	78.1	3.84	.898	
Ecuador	13(p)	-			
Venezuela	8(21)	38.1	4.38	.518	
Mexico	63(80)	78.8	4.43	.530	
Colombia	77(p)	-			
Portugal	13(13)	100.0	3.46	.519	

Table 3.15 Trends in developing a two-way communication system

(p) Missing values

values support. Regarding standard deviation, we may note the specific case of Bolivia with less uniformity of responses as well as Panama and Uruguay. The analysis of this variable cannot be generalised across countries due to high missing values.

At the same time, while the previous table highlighted the existence of communicative processes, it is interesting to link this to another relevant dimension of the communication process, namely, its evaluation (Table 3.16). It is important to note that when these processes are subject to validation, based on the existence of any feedback processes to ensure that the conveyed concepts are understood, we can see that there is some variability between countries. As for the previous case, a third of the data is missing, however, in the countries that provided data; the level of participation is high around 89 %. These data suggest that the parallel or integrated process of communicating and evaluating the communicated strategy can be a challenge when it comes to aligning the institutional strategy and the impact of its results.

The countries with lower participation were Venezuela (28.6 %) and Mexico (42.5 %), but these countries also presented more positive evidence on the existence of mechanisms to assess the communication process restricting further conclusions. Overall, in the rest of the countries, the evidence being provided is more consistent, due to the higher level of participation, and also the mean is above 3, in the cases of

	Establishme	nt of a process to	assess the level	of identification	of units
	and individu	als with the corpo	orate strategy		
Country	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{ ext{Total}}$
Spain	39(54)	72.2	2.97	1.038	3.31
Paraguay	6(p)	100.0	-	-	
Costa Rica	12(p)	100.0	-	-	
Uruguay	7(7)	100.0	2.71	1.254	
Chile	18(18)	100.0	3.28	1.127	
Argentina	14(p)	100.0	-	-	
Bolivia	27(27)	100.0	3.07	1.517	
Panama	27(27)	100.0	3.56	1.251	
Peru	14(14)	100.0	2.57	.938	
El Salvador	28(32)	87.5	3.68	1.249	
Ecuador	13(p)	100.0	-	-	
Venezuela	6(21)	28.6	4.17	.408	
Mexico	34(80)	42.5	4.26	.448	
Colombia	77(p)	100.0			
Portugal	13(13)	100.0	2.85	.555	

Table 3.16 Trends in assessing the strategy communication

(p) Missing values

Chile, Bolivia, Panama and El Salvador. Concerning the uniformity of responses, the countries with more consistency were Peru, Venezuela and Mexico, with a standard deviation below 1.

In general, although specific data were not obtained from every country, the HEIs analysed in terms of their communication processes associated with the implementation of strategic plans evoke significant criticism and in many contexts are considered insufficient, raising doubts as to whether or not the communicated strategic plans have effectively mobilised the different actors involved. In most countries, we can see the existence of communication plans associated with the strategic plan, although the processes for evaluating them are problematic.

#### 3.5.3 Alignment of the Institutional Strategy

The implementation of a new strategic undertaking should bring about coherent and integrated change throughout the organisation; as such, alignment of the factors and elements comprising the management systems in HEIs is a relevant factor in the implementation process. Alignment of the elements and systems that enable the institution to be managed by the strategy is also a symptom of how HEIs materialise their strategy. In assessing the trends in institutional elements aligned with the institutional strategy (Table 3.17), in the majority of the cases, the different elements included the annual budget, the personal policy, ICT and information systems, process and quality management as well as monitoring systems, evidenced by the individual mean comparison with an overall mean of 3.99.

	Annual b	oudget				Personne	el policy			
Country	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$
Spain	33(54)	61.11	5.00	0.00	4.21	30(54)	55.56	5.00	0.00	4.03
Paraguay	4(6)	66.67	5.00	0.00		3(6)	50.00	5.00	0.00	
Costa Rica	12(12)	100.00	4.17	1.03		12(12)	100.00	4.00	1.04	
Uruguay	7(7)	100.00	4.71	0.49		7(7)	100.00	3.57	0.98	
Chile	18(18)	100.00	4.33	0.84		18(18)	100.00	3.94	0.80	
Argentina	14(14)	100.00	3.71	1.14		14(14)	100.00	3.36	1.28	
Bolivia	27(27)	100.00	3.78	0.75		27(27)	100.00	3.78	0.80	
Panama	27(27)	100.00	3.96	0.94		27(27)	100.00	4.11	0.51	
Peru	14(14)	100.00	3.43	0.94		14(14)	100.00	3.00	0.96	
El Salvador	28(32)	87.50	4.29	0.76		28(32)	87.50	4.14	0.80	
Ecuador	13(p)	-	-	-		13(p)	_			
Venezuela	12(21)	57.14	4.25	0.45		10(21)	47.62	4.20	0.42	
Mexico	74(80)	92.50	4.23	0.54		74(80)	92.50	4.38	0.63	
Colombia	77(p)	-	-	-		77(p)	-			
Portugal	13(13)	100.00	3.92	0.28		13(13)	100.00	3.92	0.28	
	ICT poli	су				Informat	ion systen	ns		
Country	F	%	$\mu_{ m i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$
Spain	25(54)	46.30	5.00	0.00	3.99	21(554)	38.89	5.00	0.00	3.99
Paraguay	3(6)	50.00	5.00	0.00		4(6)	66.67	5.00	0.00	
Costa Rica	12(12)	100.00	3.67	0.98		12(12)	100.00	4.00	1.04	
Uruguay	7(p)	-				7(7)	100.00	3.57	0.98	
Chile	18(18)	100.00	3.89	0.76		18(18)	100.00	4.06	0.80	
Argentina	14(14)	100.00	3.07	1.54		14(14)	100.00	3.43	0.76	
Bolivia	27(27)	100.00	3.85	0.82		27(27)	100.00	3.67	0.48	
Panama	27(27)	100.00	4.00	0.92		27(27)	100.00	3.96	0.98	
Peru	13(14)	92.86	3.31	1.32		13(14)	92.86	2.85	1.07	
El Salvador	27(32)	84.38	4.15	0.77		26(32)	81.25	4.19	0.80	
Ecuador	13(p)	-				13(p)	-			
Venezuela	10(21)	47.62	4.18	0.40		12(21)	57.14	4.33	0.49	
Mexico	73(80)	91.25	4.18	0.69		75(80)	93.75	4.17	0.67	
Colombia	77(p)	-				77(p)	-			
Portugal	13(13)	100.00	3.62	0.65		13(13)	100.00	3.62	0.65	

 Table 3.17
 Trends in institutional elements aligned with the institutional strategy

(continued)

	Process	manageme	ent			Monitor	ing system	IS		
Country	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$
Spain	21(54)	38.89	5.00	0.00	3.99	26(54)	48.15	5.00	0.00	3.94
Paraguay	3(6)	50.00	5.00	0.00		3(6)	50.00	5.00	0.00	
Costa Rica	12(p)	-				12(12)	100.00	3.33	1.67	
Uruguay	7(p)	-				7(p)	-			
Chile	18(18)	100.00	4.06	0.80		18(18)	100.00	4.17	0.71	
Argentina	14(14)	100.00	2.79	1.05		14(14)	100.00	2.71	1.27	
Bolivia	27(27)	100.00	3.96	0.76		27(27)	100.00	3.96	0.76	
Panama	27(27)	100.00	4.07	0.73		27(27)	100.00	4.11	0.75	
Peru	13(14)	92.86	2.69	0.95		13(14)	92.86	2.77	1.17	
El Salvador	26(32)	81.25	4.27	0.83		26(32)	81.25	4.04	0.77	
Ecuador	13(p)	-				13(p)	-			
Venezuela	9(21)	42.86	4.11	0.33		11(21)	52.38	4.36	0.50	
Mexico	75(80)	93.75	4.33	0.60		65(80)	81.25	4.43	0.53	
Colombia	77(p)	-				77(p)	-			
Portugal	13(13)	100.00	3.62	0.65		13(13)	100.00	3.38	0.51	
-										
	Quality 1	manageme	ent			Corpora	te social re	esponsil	oility	
Country	Quality I F	manageme %	ent $\mu_i$	σi	$\mu_{\text{Total}}$	Corpora F	te social re %	esponsit $\mu_i$	oility $\sigma_i$	$\mu_{\text{Total}}$
Country Spain	Quality 1 <i>F</i> 34(54)	manageme % 62.96	$\begin{array}{c} \text{ent} \\ \mu_{i} \\ 5.00 \end{array}$	$\sigma_{\rm i}$ 0.00	$\frac{\mu_{\text{Total}}}{3.94}$	Corpora <i>F</i> 16(54)	te social re % 29.63	esponsit $\mu_i$ 5.00	$ \begin{array}{c} \text{oility} \\ \sigma_{i} \\ 0.00 \end{array} $	μ <sub>Total</sub> 3.83
Country Spain Paraguay	Quality 1 F 34(54) 2(6)	manageme % 62.96 33.33	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \end{array}$	$\sigma_{\rm i}$ 0.00 0.00	μ <sub>Total</sub> 3.94	Corpora <i>F</i> 16(54) 3(6)	te social re % 29.63 50.00	esponsit $\mu_i$ 5.00 5.00	$ \begin{array}{c} \text{oility} \\ \sigma_{i} \\ 0.00 \\ 0.00 \end{array} $	$\frac{\mu_{\text{Total}}}{3.83}$
Country Spain Paraguay Costa Rica	Quality 1 F 34(54) 2(6) 12(12)	manageme % 62.96 33.33 100.00	ent μ <sub>i</sub> 5.00 5.00 3.67	$\sigma_{i}$ 0.00 0.00 1.56	μ <sub>Total</sub> 3.94	Corpora <i>F</i> 16(54) 3(6) 12(12)	te social re % 29.63 50.00 100.00	$ \begin{array}{c} \mu_i \\ 5.00 \\ 5.00 \\ 4.00 \end{array} $	$ \begin{array}{c c}                                    $	μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay	Quality 1 F 34(54) 2(6) 12(12) 7(7)	manageme % 62.96 33.33 100.00 100.00	μi           5.00           5.00           3.67           3.86	$\sigma_i$ 0.00 0.00 1.56 0.69	μ <sub>Total</sub> 3.94	Corpora <i>F</i> 16(54) 3(6) 12(12) 7(7)	te social re % 29.63 50.00 100.00 100.00	$ \begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 4.00 \\ 3.57 \end{array} $	$ \begin{array}{c c}                                    $	μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18)	manageme % 62.96 33.33 100.00 100.00 100.00	$ \begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 3.67 \\ 3.86 \\ 3.83 \end{array} $	$\sigma_{i}$ 0.00 0.00 1.56 0.69 0.79	μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18)	te social re % 29.63 50.00 100.00 100.00 100.00	$ \begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 4.00 \\ 3.57 \\ 4.06 \\ \end{array} $		μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile Argentina	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18) 14(14)	manageme           %           62.96           33.33           100.00           100.00           100.00           100.00           100.00	$\begin{array}{c} \mu_{i} \\ \hline \\ 5.00 \\ 5.00 \\ \hline \\ 3.67 \\ \hline \\ 3.86 \\ \hline \\ 3.83 \\ \hline \\ 3.07 \end{array}$	$\sigma_i$ 0.00 0.00 1.56 0.69 0.79 1.07	μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18) 14(14)	te social re % 29.63 50.00 100.00 100.00 100.00 100.00 100.00			μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18) 14(14) 27(27)	manageme           %           62.96           33.33           100.00           100.00           100.00           100.00           100.00           100.00	$\begin{array}{c} \mu_{i} \\ \hline \mu_{i} \\ 5.00 \\ 5.00 \\ 3.67 \\ 3.86 \\ 3.83 \\ 3.07 \\ 3.63 \end{array}$	$\sigma_i$ 0.00 0.00 1.56 0.69 0.79 1.07 0.49	μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18) 14(14) 27(27)	te social re % 29.63 50.00 100.00 100.00 100.00 100.00 100.00	$\begin{array}{c} \mu_{i} \\ \hline \mu_{i} \\ 5.00 \\ 5.00 \\ 4.00 \\ 3.57 \\ 4.06 \\ 2.14 \\ 3.70 \end{array}$	Dility           \$\sigma_i\$           0.00           0.00           1.60           0.98           0.80           1.51           0.78	μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27)	manageme           %           62.96           33.33           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 5.00 \\ 5.00 \\ 3.67 \\ 3.86 \\ 3.83 \\ 3.07 \\ 3.63 \\ 3.89 \end{array}$		μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27)	te social re % 29.63 50.00 100.00 100.00 100.00 100.00 100.00 100.00	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 5.00 \\ 5.00 \\ 4.00 \\ 3.57 \\ 4.06 \\ 2.14 \\ 3.70 \\ 3.96 \end{array}$		μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14)	manageme           %           62.96           33.33           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           92.86	$\begin{array}{c} \mu_{i} \\ \hline \mu_{i} \\ \hline 5.00 \\ \hline 5.00 \\ \hline 3.67 \\ \hline 3.86 \\ \hline 3.83 \\ \hline 3.07 \\ \hline 3.63 \\ \hline 3.89 \\ \hline 2.92 \end{array}$	$\begin{array}{c} \sigma_{\rm i} \\ 0.00 \\ 0.00 \\ 1.56 \\ 0.69 \\ 0.79 \\ 1.07 \\ 0.49 \\ 0.80 \\ 1.19 \end{array}$	μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14)	te social re % 29.63 50.00 100.00 100.00 100.00 100.00 100.00 100.00 92.86	$\begin{array}{c} \mu_{i} \\ \hline \mu_{i} \\ 5.00 \\ 5.00 \\ 4.00 \\ 3.57 \\ 4.06 \\ 2.14 \\ 3.70 \\ 3.96 \\ 2.62 \end{array}$	$\begin{array}{c c} \text{bility} & \\ \hline \sigma_i & \\ 0.00 & \\ 0.00 & \\ 1.60 & \\ 0.98 & \\ 0.80 & \\ 1.51 & \\ 0.78 & \\ 0.81 & \\ 1.19 & \\ \end{array}$	μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 27(32)	manageme           %           62.96           33.33           100.00           100.00           100.00           100.00           100.00           100.00           92.86           84.38	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 5.00 \\ 5.00 \\ 3.67 \\ 3.86 \\ 3.83 \\ 3.07 \\ 3.63 \\ 3.89 \\ 2.92 \\ 4.11 \end{array}$	$\begin{array}{c} \sigma_{\rm i} \\ 0.00 \\ 0.00 \\ 1.56 \\ 0.69 \\ 0.79 \\ 1.07 \\ 0.49 \\ 0.80 \\ 1.19 \\ 0.93 \end{array}$	μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 26(32)	te social re % 29.63 50.00 100.00 100.00 100.00 100.00 100.00 100.00 92.86 81.25	$\begin{array}{c} \mu_{i} \\ \hline \mu_{i} \\ 5.00 \\ 5.00 \\ 4.00 \\ 3.57 \\ 4.06 \\ 2.14 \\ 3.70 \\ 3.96 \\ 2.62 \\ 3.81 \end{array}$	$\begin{array}{c c} \text{bility} \\ \hline \sigma_i \\ \hline 0.00 \\ 0.00 \\ \hline 1.60 \\ 0.98 \\ 0.80 \\ \hline 1.51 \\ 0.78 \\ 0.81 \\ \hline 1.19 \\ 0.85 \end{array}$	μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 27(32) 13(p)	manageme           %           62.96           33.33           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           92.86           84.38	μi           5.00           5.00           3.67           3.86           3.83           3.07           3.63           3.89           2.92           4.11	σ <sub>i</sub> 0.00           0.00           1.56           0.69           0.79           1.07           0.49           0.80           1.19           0.93	μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 26(32) 13(p)	te social re % 29.63 50.00 100.00 100.00 100.00 100.00 100.00 92.86 81.25 -	$\begin{array}{c c} \mu_i \\ \mu_i \\ \hline 5.00 \\ 5.00 \\ 4.00 \\ 3.57 \\ 4.06 \\ 2.14 \\ 3.70 \\ 3.96 \\ 2.62 \\ 3.81 \end{array}$	$\begin{array}{c c} \text{bility} & \\ \hline \sigma_i & \\ 0.00 & \\ 0.00 & \\ 1.60 & \\ 0.98 & \\ 0.80 & \\ 1.51 & \\ 0.78 & \\ 0.81 & \\ 1.19 & \\ 0.85 & \\ \end{array}$	μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador Venezuela	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 27(32) 13(p) 9(21)	manageme           %           62.96           33.33           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           92.86           84.38           -           42.86	$\begin{array}{c} \mu_i \\ \mu_i \\ 5.00 \\ 5.00 \\ 3.67 \\ 3.86 \\ 3.83 \\ 3.07 \\ 3.63 \\ 3.89 \\ 2.92 \\ 4.11 \\ \hline \\ 4.22 \end{array}$		μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 26(32) 13(p) 10(21)	te social re % 29.63 50.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 92.86 81.25 - 47.62	$\begin{array}{c} \mu_{i} \\ \mu_{i} \\ 5.00 \\ 5.00 \\ 4.00 \\ 3.57 \\ 4.06 \\ 2.14 \\ 3.70 \\ 3.96 \\ 2.62 \\ 3.81 \\ \hline \\ 4.30 \end{array}$	$\begin{array}{c} \text{bility} \\ \hline \sigma_i \\ \hline 0.00 \\ 0.00 \\ 1.60 \\ 0.98 \\ 0.80 \\ 1.51 \\ 0.78 \\ 0.81 \\ 1.19 \\ 0.85 \\ \hline 0.48 \end{array}$	μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador Venezuela Mexico	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 27(32) 13(p) 9(21) 68(80)	manageme           %           62.96           33.33           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           92.86           84.38           -           42.86           85.00	$\begin{array}{c} \mu_i \\ \mu_i \\ 5.00 \\ 5.00 \\ 3.67 \\ 3.86 \\ 3.83 \\ 3.07 \\ 3.63 \\ 3.89 \\ 2.92 \\ 4.11 \\ \hline \\ 4.22 \\ 4.47 \end{array}$		μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 26(32) 13(p) 10(21) 59(80)	te social re % 29.63 50.00 100.00 100.00 100.00 100.00 100.00 100.00 92.86 81.25 - 47.62 73.75		$\begin{array}{c} \text{bility} \\ \hline \sigma_i \\ \hline 0.00 \\ 0.00 \\ 1.60 \\ 0.98 \\ 0.80 \\ 1.51 \\ 0.78 \\ 0.81 \\ 1.19 \\ 0.85 \\ \hline 0.48 \\ 0.50 \\ \end{array}$	μ <sub>Total</sub> 3.83
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador Venezuela Mexico Colombia	Quality 1 F 34(54) 2(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 27(32) 13(p) 9(21) 68(80) 77(p)	manageme           %           62.96           33.33           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           100.00           92.86           84.38           -           42.86           85.00           -	$\begin{array}{c} \text{ent} \\ \mu_i \\ 5.00 \\ 5.00 \\ 3.67 \\ 3.86 \\ 3.83 \\ 3.07 \\ 3.63 \\ 3.89 \\ 2.92 \\ 4.11 \\ \\ 4.22 \\ 4.47 \end{array}$		μ <sub>Total</sub> 3.94	Corpora F 16(54) 3(6) 12(12) 7(7) 18(18) 14(14) 27(27) 27(27) 13(14) 26(32) 13(p) 10(21) 59(80) 77(p)	te social re % 29.63 50.00 100.00 100.00 100.00 100.00 100.00 100.00 92.86 81.25 - 47.62 73.75 -			μ <sub>Total</sub> 3.83

 Table 3.17 (continued)

(p) Missing values

For the standard deviation per country, the uniformity of responses is high. Moreover, the participation rate is also higher, which might provide more robustness to the conclusions. We should acknowledge that the countries with a higher consistency between the responses were Spain (46.3 %) and Paraguay (50 %), and the level of standard deviation supports that the institutions mostly responded

choosing the superior degree of accordance (5). Regarding the alignment of the strategy with the institutional annual budget and personnel policies, Colombia and Ecuador did not provide data for any of the variables being analysed. Among the countries that presented responses, Argentina, Peru and Bolivia had less uniformity and lower means for the alignment of the budget and institutional policies within their strategies.

Regarding the alignment of ICT policy and information systems, Argentina and Peru again were less affirmative in relation to these elements. Observing the aspects of the process and quality management and monitoring systems, Peru, Argentina and Costa Rica had less uniformity of responses concerning the agreement on alignment of these aspects as well as the social corporate responsibility for strategy.

# 3.5.4 Methodologies Used for Supporting the Implementation of the Institutional Strategy

Another aspect explored in this study was the use of different tools to support the institutions in their strategy implementation (Table 3.18). The three main tools mentioned by the institutions across countries are the use of the balanced scorecard, the development of improvement groups and management by objectives. The mean values, which in all cases exceed 3 (agreed to use the tool), support this claim but some institutions did not select other options, leaving blank spaces (missing values).

Therefore, the most frequently used tool was management by objectives. However, the other tools showed a value close to 4, and accordingly, the institutions across the countries reported a certain balance in the use of these tools. Regarding service catalogues, even if the mean value is very close to 4 (3.9), the number of missing values suggests that this tool was not used in all contexts. Spain had a higher number of institutions agreeing with using this tool, followed by Bolivia. Regarding participation rates, except in the case of service catalogues, the remaining three tools were very similar, ranging between 71 and 85 %. The uniformity of responses, based on the standard deviation, is very high.

In the case of the balance scorecard and management by objectives, Spain had less uniformity among the participating institutions. On the other hand, the countries with a higher level of uniformity were Paraguay, Costa Rica and Ecuador, with participation rates averaging 50 %. For balance scorecard, Uruguay had a higher participation rate and suggested they do not use this tool. Furthermore, in the case of management by objectives and improvement groups, we see that Paraguay and Costa Rica, followed by Spain and Chile, made uniform use of these tools.

	Balanced	l scorecard	ł			Manager	nent by ol	ojective	s (MBC	D)
Country	F	%	$\mu_{ m i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$
Spain	54(54)	100.00	2.41	2.52	3.55	54(54)	100.00	2.50	2.52	4.07
Paraguay	1(6)	16.67	5.00	0.00		3(6)	50.00	5.00	0.00	
Costa Rica	5(12)	41.67	5.00	0.00		10(12)	83.33	5.00	0.00	
Uruguay	7(7)	100.00	1.00	0.00		7(7)	100.00	3.86	1.95	
Chile	11(18)	61.11	4.36	0.50		14(18)	77.78	4.36	0.50	
Argentina	14(14)	100.00	2.50	0.76		14(14)	100.00	3.43	1.50	
Bolivia	27(27)	100.00	3.63	0.74		27(27)	100.00	3.85	0.72	
Panama	27(27)	100.00	4.00	0.73		27(27)	100.00	4.15	0.60	
Peru	13(14)	92.86	2.69	1.11		13(14)	92.86	3.46	1.20	
El Salvador	12(32)	37.50	4.42	0.51		18(32)	56.25	4.39	0.50	
Ecuador	3(13)	23.08	4.00	0.00		6(13)	46.15	4.33	0.50	
Venezuela	9(21)	42.86	4.25	0.45		12(21)	57.14	4.25	0.45	
Mexico	41(80)	51.25	4.46	0.50		67(80)	83.75	4.48	0.50	
Colombia	77(p)	-	-	-		77(p)	-	-	-	
Portugal	13(13)	100.00	1.92	0.28		13(13)	100.00	3.92	0.28	
	Improve	ment grou	ns			Service (	ratalogues			
	-	0	Po			Bervice c	Juniogues			
Country	F	%	$\mu_{i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$
Country Spain	<i>F</i> 54(54)	% 100.00	$\mu_{i}$ 5.00	$\sigma_{ m i}$ 0.00	$\mu_{\text{Total}}$ 3.85	<i>F</i> 54(54)	% 100.00	μ <sub>i</sub> 5.00	$\sigma_{ m i}$ 0.00	$\frac{\mu_{\text{Total}}}{3.90}$
Country Spain Paraguay	F           54(54)           3(6)	% 100.00 50.00	$\mu_{i}$ 5.00 5.00	$\sigma_{ m i} = 0.00 = 0.00$	μ <sub>Total</sub> 3.85	F           54(54)           1(6)	% 100.00 16.67	μ <sub>i</sub> 5.00 5.00	$\sigma_{\rm i} = 0.00 = 0.00$	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica	F           54(54)           3(6)           5(12)	% 100.00 50.00 41.67	$ \begin{array}{c c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \end{array} $	$\sigma_{ m i}$ 0.00 0.00 0.00	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)	%           100.00           16.67           8.33	$\mu_{i}$ 5.00 5.00 5.00	$\sigma_{ m i}$ 0.00 0.00 0.00	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay	F           54(54)           3(6)           5(12)           7(7)	%           100.00           50.00           41.67           100.00	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \end{array}$	$\sigma_{i}$ 0.00 0.00 0.00 1.60	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)	% 100.00 16.67 8.33 -	$     \mu_i $ 5.00 5.00 5.00	$\sigma_{\rm i}$ 0.00 0.00 0.00	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile	F           54(54)           3(6)           5(12)           7(7)           8(18)	%           100.00           50.00           41.67           100.00           44.44	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \\ 4.00 \end{array}$	$\sigma_{i}$ 0.00 0.00 0.00 1.60 0.00	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)	%           100.00           16.67           8.33           -           33.33	$ \begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 4.50 \end{array} $	$\sigma_{i}$ 0.00 0.00 0.00 0.55	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile Argentina	F           54(54)           3(6)           5(12)           7(7)           8(18)           14(14)	%           100.00           50.00           41.67           100.00           44.44           100.00	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \\ 4.00 \\ 2.50 \end{array}$	$ \begin{array}{c} \sigma_{\rm i} \\ 0.00 \\ 0.00 \\ 1.60 \\ 0.00 \\ 1.02 \\ \end{array} $	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)           14(14)	%           100.00           16.67           8.33           -           33.33           100.00	$     \mu_i $ 5.00 5.00 5.00 4.50 2.14	$\sigma_{i}$ 0.00 0.00 0.00 0.55 0.36	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia	F           54(54)           3(6)           5(12)           7(7)           8(18)           14(14)           27(27)	% 100.00 50.00 41.67 100.00 44.44 100.00 100.00	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \\ 4.00 \\ 2.50 \\ 3.33 \end{array}$		μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)           14(14)           27(27)	%           100.00           16.67           8.33           -           33.33           100.00           100.00	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 4.50 \\ 2.14 \\ 3.15 \end{array}$	σ <sub>i</sub> 0.00           0.00           0.00           0.55           0.36	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama	F           54(54)           3(6)           5(12)           7(7)           8(18)           14(14)           27(27)           27(27)	% 100.00 50.00 41.67 100.00 44.44 100.00 100.00 100.00	μ <sub>i</sub> 5.00 5.00 2.71 4.00 2.50 3.33 3.85		μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)           14(14)           27(27)           27(27)	%           100.00           16.67           8.33           -           33.33           100.00           100.00           100.00	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 4.50 \\ 2.14 \\ 3.15 \end{array}$	σ <sub>i</sub> 0.00           0.00           0.00           0.00           0.55           0.36	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru	F           54(54)           3(6)           5(12)           7(7)           8(18)           14(14)           27(27)           27(27)           13(14)	% 100.00 50.00 41.67 100.00 44.44 100.00 100.00 100.00 92.86	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \\ 4.00 \\ 2.50 \\ 3.33 \\ 3.85 \\ 2.31 \end{array}$	$\begin{array}{c} \sigma_{\rm i} \\ 0.00 \\ 0.00 \\ 1.60 \\ 0.00 \\ 1.02 \\ 0.48 \\ 0.66 \\ 0.63 \end{array}$	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)           14(14)           27(27)           27(27)           13(14)	%           100.00           16.67           8.33           -           33.33           100.00           100.00           100.00           92.86	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 4.50 \\ 2.14 \\ 3.15 \\ 2.08 \end{array}$	σ <sub>i</sub> 0.00           0.00           0.00           0.00           0.55           0.36           0.36           0.28	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador	F           54(54)           3(6)           5(12)           7(7)           8(18)           14(14)           27(27)           27(27)           13(14)           22(32)	% 100.00 50.00 41.67 100.00 44.44 100.00 100.00 100.00 92.86 68.75	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \\ 4.00 \\ 2.50 \\ 3.33 \\ 3.85 \\ 2.31 \\ 4.36 \end{array}$	$\begin{array}{c} \sigma_{\rm i} \\ 0.00 \\ 0.00 \\ 1.60 \\ 0.00 \\ 1.02 \\ 0.48 \\ 0.66 \\ 0.63 \\ 0.49 \end{array}$	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)           14(14)           27(27)           27(27)           13(14)           32(p)	%           100.00           16.67           8.33           -           33.33           100.00           100.00           100.00           92.86	μ <sub>i</sub> 5.00 5.00 4.50 2.14 3.15 2.08	σ <sub>i</sub> 0.00           0.00           0.00           0.55           0.36           0.36           0.28	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador	F 54(54) 3(6) 5(12) 7(7) 8(18) 14(14) 27(27) 27(27) 13(14) 22(32) 4(13)	% 100.00 50.00 41.67 100.00 44.44 100.00 100.00 100.00 92.86 68.75 30.77	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \\ 4.00 \\ 2.50 \\ 3.33 \\ 3.85 \\ 2.31 \\ 4.36 \\ 4.00 \end{array}$	$\begin{array}{c} \sigma_{\rm i} \\ 0.00 \\ 0.00 \\ 1.60 \\ 0.00 \\ 1.60 \\ 0.00 \\ 1.02 \\ 0.48 \\ 0.66 \\ 0.63 \\ 0.49 \\ 0.00 \end{array}$	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)           14(14)           27(27)           27(27)           13(14)           32(p)           13(p)	%           100.00           16.67           8.33           -           33.33           100.00           100.00           100.00           100.00           -           -           -           -           -           33.33           -           -           -           -           -           -	$\begin{array}{c} \mu_{\rm i} \\ 5.00 \\ 5.00 \\ \hline \\ 4.50 \\ 2.14 \\ 3.15 \\ \hline \\ 2.08 \\ \hline \end{array}$	σi           0.00           0.00           0.00           0.55           0.36           0.28	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador Venezuela	$\begin{array}{c} F\\ \hline \\ 54(54)\\ 3(6)\\ 5(12)\\ 7(7)\\ 8(18)\\ 14(14)\\ 27(27)\\ 27(27)\\ 13(14)\\ 22(32)\\ 4(13)\\ 11(21)\\ \end{array}$	% 100.00 50.00 41.67 100.00 44.44 100.00 100.00 100.00 92.86 68.75 30.77 52.38	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \\ 4.00 \\ 2.50 \\ 3.33 \\ 3.85 \\ 2.31 \\ 4.36 \\ 4.00 \\ 4.20 \end{array}$	$\begin{array}{c} \sigma_{\rm i} \\ 0.00 \\ 0.00 \\ 1.60 \\ 0.00 \\ 1.02 \\ 0.48 \\ 0.66 \\ 0.63 \\ 0.49 \\ 0.00 \\ 0.42 \end{array}$	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)           14(14)           27(27)           27(27)           13(14)           32(p)           13(p)           21(p)	%           100.00           16.67           8.33           -           33.33           100.00           100.00           100.00           92.86           -           -           -	μ <sub>i</sub> 5.00 5.00 4.50 2.14 3.15 2.08	σ <sub>i</sub> 0.00           0.00           0.00           0.55           0.36           0.28	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador Venezuela Mexico	F 54(54) 3(6) 5(12) 7(7) 8(18) 14(14) 27(27) 27(27) 13(14) 22(32) 4(13) 11(21) 47(80)	% 100.00 50.00 41.67 100.00 44.44 100.00 100.00 100.00 92.86 68.75 30.77 52.38 58.75	$\begin{array}{c} \mu_{i} \\ \hline \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \\ 4.00 \\ 2.50 \\ 3.33 \\ 3.85 \\ 2.31 \\ 4.36 \\ 4.00 \\ 4.20 \\ 4.43 \end{array}$	$\begin{array}{c} \sigma_{\rm i} \\ 0.00 \\ 0.00 \\ 1.60 \\ 0.00 \\ 1.02 \\ 0.48 \\ 0.66 \\ 0.63 \\ 0.49 \\ 0.00 \\ 0.42 \\ 0.50 \end{array}$	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)           14(14)           27(27)           27(27)           13(14)           32(p)           13(p)           21(p)           12(80)	%           100.00           16.67           8.33           -           33.33           100.00           100.00           100.00           92.86           -           -           15.00	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ \hline \\ 4.50 \\ 2.14 \\ 3.15 \\ \hline \\ 2.08 \\ \hline \\ 4.33 \end{array}$	σ <sub>i</sub> 0.00           0.00           0.55           0.36           0.28           0.28           0.49	μ <sub>Total</sub> 3.90
Country Spain Paraguay Costa Rica Uruguay Chile Argentina Bolivia Panama Peru El Salvador Ecuador Venezuela Mexico Colombia	F           54(54)           3(6)           5(12)           7(7)           8(18)           14(14)           27(27)           27(27)           13(14)           22(32)           4(13)           11(21)           47(80)           77(p)	% 100.00 50.00 41.67 100.00 44.44 100.00 100.00 100.00 92.86 68.75 30.77 52.38 58.75 -	$\begin{array}{c} \mu_{i} \\ \hline \\ 5.00 \\ 5.00 \\ 5.00 \\ 2.71 \\ 4.00 \\ 2.50 \\ 3.33 \\ 3.85 \\ 2.31 \\ 4.36 \\ 4.00 \\ 4.20 \\ 4.43 \\ - \end{array}$	$\begin{array}{c} \sigma_{\rm i} \\ 0.00 \\ 0.00 \\ 1.60 \\ 0.00 \\ 1.02 \\ 0.48 \\ 0.66 \\ 0.63 \\ 0.49 \\ 0.00 \\ 0.42 \\ 0.50 \\ - \end{array}$	μ <sub>Total</sub> 3.85	F           54(54)           1(6)           1(12)           7(p)           6(18)           14(14)           27(27)           27(27)           13(14)           32(p)           13(p)           21(p)           12(80)           77(p)	%           100.00           16.67           8.33           -           33.33           100.00           100.00           100.00           92.86           -           -           15.00	$\begin{array}{c} \mu_{i} \\ 5.00 \\ 5.00 \\ \hline \\ 4.50 \\ 2.14 \\ 3.15 \\ \hline \\ 2.08 \\ \hline \\ 4.33 \\ \end{array}$	σ <sub>i</sub> 0.00           0.00           0.55           0.36           0.36           0.28           0.28           0.49	μ <sub>Total</sub> 3.90

 Table 3.18
 Trends in the use of different methodologies when implementing the institutional strategy

(p) Missing values

# 3.5.5 Obstacles and Keys to Success for Strategic Implementation

The study also explored the problems and challenges faced by HEIs when implementing their strategic planning processes. We have grouped these variables together (barriers and key factors) and have not analysed each country separately in order

Barriers	$\mu_{\rm i}$	$\mu_{\rm i}$	Drivers
Partial vision of the institutional strategy	3.53	4.16	Shared strategic vision
Resistance to change	3.54	3.88	Remarkable integration of teams and individuals
Little methodological support to manage the process	3.66	3.75	Information systems mechanisms that are useful for supporting strategic decision-making
	-	4.58	Committed leadership
	-	3.91	Completed deployment
Poor commitment	3.32	4.07	Clearly identified commitment of people
Infrequent monitoring	3.46	3.92	Permanent monitoring
Poor alignment	3.6	3.93	Total alignment
Inefficient communication processes	3.71	3.79	Effective communication

Table 3.19 Trends associated with key successful strategy implementation factors and barriers faced

to try to specify the most convergent elements across the region when facing the challenges imposed by the strategy implementation. Table 3.19 presents the integration of the overall mean value that resulted from the individual country analysis.

Moreover, in the case of barriers, the mean values do not exceed 3.75 points. This indicates that institutions agree that the factors analysed are viewed as a barrier. On the other hand, the positive factors have an average starting point of 3.75 indicating stronger responses. In all cases, the mean of the barriers is lower compared to the positive elements, although in some cases the difference is minimal as in the case of communication.

Overall, the countries coincide a great deal with the existence of similar barriers faced when implementing their strategic programmes. When it comes to launching the strategy and keeping it alive every day, the most common and problematic barrier to overcome is the gap between policy-making and implementation. The issues of greatest concern, seen as opportunities for improvement, are the existence of partial visions of the strategy, lack of commitment, ineffective communication and reporting mechanisms that are more descriptive than truly strategic in nature. On the other hand, the most valued key factors for ensuring successful implementation were achieving a shared vision of the institutional strategy and the boost of committed leadership upon the process and clear identification and implication of the people involved within the process. The other factors presented similar values.

In general, the aspects emerging as barriers influencing the process might be consequence of deficiencies in the processes of communicating the defined strategy but might also be linked with the need to develop systems and utilise methods that make it possible to verify the level of understanding, ownership and alignment of the strategy for the different levels of people, teams and units.

## 3.6 LEARNING: Control, Evaluation and Review of Strategic Management at HEIs

The monitoring and control phase continues to emerge as a requirement that affects the success of the strategic project. This stage is also very important for effectively and efficiently implementing the strategy as changes that often cause resistance begin to emerge. Also, this requirement oftentimes can give rise to inefficiencies in rehabilitation and learning systems. The monitoring, control and evaluation phase is lengthy, in parallel to the implementation, which typically has little effect in the short term; these aspects underline the difficulty in the strategic process. The monitoring and control process can be more successful insofar as the formulated strategic objectives are formalised and integrated into institutional management systems. Accordingly, this study explored the elements and characteristics of the monitoring systems that are employed and used by the institutions in different countries.

#### 3.6.1 Monitoring the Strategic Implementation

Table 3.20 presents the results of the existence of a formal procedure for monitoring strategy implementation within the institutions.

Among the countries with explicit data, the universities agreed that they develop efforts to conduct the monitoring of their strategic planning processes with an overall mean around or above 4. Participation rates were higher (above 70 %); however, some countries such as Spain and Venezuela had less participation. Uniformity of

Country	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$
Spain	5(54)	9.26	4.49	1.35	3.92
Paraguay	6(6)	100.00	3.67	2.07	
Costa Rica	12(12)	100.00	4.00	1.81	
Uruguay	7(7)	100.00	3.57	1.27	
Chile	13(18)	72.22	4.46	0.52	
Bolivia	27(27)	100.00	3.78	0.70	
Panama	27(27)	100.00	3.81	0.96	
Peru	13(14)	92.86	3.15	0.80	
El Salvador	27(32)	84.38	4.00	0.83	
Venezuela	11(21)	52.38	4.18	0.40	
Mexico	65(80)	81.25	4.46	0.50	
Portugal	13(13)	100.00	3.46	0.52	

 Table 3.20
 Establishment of a formal dynamic monitoring of the implementation of the defined strategy

(n°) Number of institutions per country

Strategic monitoring at the institutional level					Strategy monitoring at the level of units					
Country	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$
Spain	28	51.85	5.00	0.00	4.24	16(54)	29.63	5.00	0.00	4.09
Paraguay	3(6)	50.00	5.00	0.00	1	3(6)	50.00	5.00	0.00	
Uruguay	7(7)	100-	4.29	0.49		7(7)	100.00	3.57	0.98	
Chile	16(18)	88.89	4.50	0.52		15(18)	83.33	4.20	0.68	
Argentina	14(14)	100.00	3.71	1.68		14(27)	100.00	2.79	1.37	
Panama	17(27)	62.96	4.29	0.47		9(27)	33.33	4.33	0.50	
Peru	13(14)	92.86	3.08	1.19		13(14)	92.86	3.46	1.05	
El Salvador	24(32)	75.00	4.38	0.65		21(32)	65.63	4.19	0.68	
Venezuela	9(21)	42.86	4.33	0.50		8(21)	38.10	4.75	0.46	
Mexico	60(80)	75.00	4.43	0.50		60(80)	75.00	4.43	0.50	
Portugal	13(13)	100.00	3.62	0.65		13(13)	100.00	3.31	0.85	

Table 3.21 Trends associated with strategy monitoring process

responses varied with Paraguay, Costa Rica and Spain having less uniformity. Argentina, Ecuador and Colombia did not provide specific responses to this variable, but other variables supporting monitoring tools and levels of monitoring were acknowledged (Tables 3.21 and 3.22). This variable examined the rate of the formalisation of strategy monitoring. Accordingly, with the exception of Spain with low participation, most of the countries have formalised strategic monitoring. Furthermore, in some contexts, this monitoring and control exhibits a relative balance between the corporate level and internal units.

With an overall participation rate below 25 %, the degree of response uniformity is quite homogeneous for both variables. Argentina and Peru had higher divergence as the institutions in these countries reported higher disagreement concerning both variables (strategic level monitoring). In the other countries, the institutions reported a fairly similar level of acceptance with standard deviations ranging between 0 and 0.68. Some countries did not respond to this variable (i.e. Costa Rica, Colombia, Bolivia and Ecuador); therefore, we are not able to generalise the comparison across all countries. Moreover, in general, we can see among the countries providing data HEIs carry out monitoring actions at the executive level, although when it came to the strategy monitoring at the level of units (i.e. academic and technical units), we observe a decrease in the participation responses, as well as a drop in level of acceptance.

#### 3.6.2 Support Tools for Monitoring

When exploring the tools the HEIs used to support the monitoring of their strategic programmes (Table 3.22), the cited tools valued above 3 indicate that the institutions apply some form of tools to guide them in this phase. The lowest total mean was 3.85, which corresponds to the balanced scorecard.

	Balanced	scorecard				Annual re	ports					Indicator	systems		
Country	F	%	$\mu_{\rm i}$	α <sub>i</sub>	$\mu_{\mathrm{Total}}$	F	%	$\mu_{i}$	Øi	$\mu_{\mathrm{Total}}$	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\mathrm{Total}}$
Spain	24(54)	44.44	5.00	0.00	3.85	30(54)	55.56	5.00	0.00	4.23	28(54)	51.85	5.00	0.00	4.04
Paraguay	1(6)	16.67	5.00	0.00		4(6)	66.67	5.00	0.00		3(6)	50.00	5.00	0.00	
Costa Rica	7(12)	58.33	5.00	0.00	1	7(12)	58.33	5.00	0.00	1	10(12)	83.33	5.00	0.00	
Uruguay	7(7)	100.00	3.14	1.07		(L) (L)	100.00	3.57	1.51		7(7)	100.00	2.71	0.76	-
Chile	13(18)	72.22	4.00	0.71		12(18)	66.67	4.58	0.51		15(18)	83.33	4.20	0.56	
Argentina	14(14)	100.00	1.71	1.27	1	14(14)	100.00	3.50	1.40	1	14(14)	100.00	3.14	0.95	2
Bolivia	12(27)	44.44	4.83	0.39		13(27)	48.15	4.31	0.48		16(27)	59.26	4.13	0.96	
Panama	27(27)	100.00	3.41	0.64		27(27)	100.00	3.33	0.68		27(27)	100.00	3.52	0.70	
Peru	12(14)	85.71	2.25	1.06		12(14)	85.71	3.58	1.31		13(14)	92.86	3.00	1.00	-
El Salvador	14(32)	43.75	4.29	0.47		19(32)	59.38	4.16	0.37		17(32)	53.13	4.18	0.39	
Ecuador	5(13)	38.46	4.00	0.00		10(13)	76.92	4.40	0.52		10(13)	76.92	4.30	0.48	-
Venezuela	5(21)	23.81	4.40	0.55		10(21)	47.62	4.40	0.52		3(21)	14.29	4.33	0.58	
Mexico	37(80)	46.25	4.46	0.51		60(80)	75.00	4.50	0.50		62(80)	77.50	4.39	0.49	
Portugal	13(13)	100.00	2.38	0.65		13(13)	100.00	3.92	0.28		13(13)	100.00	3.62	0.65	
(n°) Number oi	f institution:	s per count	ry												

Table 3.22 Trends in the use of methodologies to support strategy monitoring

	Deployn institutio	nent of ino mal level	dicator s	system a	t the	Deployment of the indicator system at the unit levels					
Country	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$	
Spain	53(54)	98.15	3.58	1.36	3.77	53(54)	98.15	3.42	1.39	3.65	
Paraguay	6(6)	100.00	3.00	0.00		6(6)	100.00	3.00	0.00	]	
Costa Rica	12(12)	100.00	3.00	0.00		12(12)	100.00	3.00	0.00	]	
Uruguay	7(7)	100.00	4.71	0.49		7(7)	100.00	4.00	1.41		
Argentina	14(14)	100.00	3.71	1.49		14(14)	100.00	3.21	1.19	]	
Bolivia	13(27)	48.15	5.00	0.00		9(27)	33.33	5.00	0.00	]	
Panama	12(27)	44.44	4.42	0.51		4(27)	14.81	4.25	0.50	]	
Peru	12(14)	85.71	2.58	1.31		13(14)	92.86	3.00	0.91	]	
Venezuela	4(21)	19.05	4.25	0.50		4(21)	19.05	4.00	0.00	]	
Mexico	57(80)	71.25	4.47	0.50		63(80)	78.75	4.46	0.50	]	
Portugal	13(13)	100.00	2.77	1.09		13(13)	100.00	2.85	1.14		
	Conducting a comparison of the institutional progress					Establish specially monitor	Establishment of an indicator system specially designed for the strategy monitoring				
Country	F	%	$\mu_{\rm i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	F	%	$\mu_{i}$	$\sigma_{\rm i}$	$\mu_{\text{Total}}$	
Spain	30(54)	55.56	1.40	0.50	3.65	34(54)	62.96	1.03	0.17	2.84	
Chile	18(p)	-	-	-		14(18)	77.78	4.36	0.50	1	
Bolivia	27(27)	100.00	3.78	0.75		13(27)	48.15	1.00	0.00		
Panama	27(27)	100.00	3.85	1.17		20(27)	74.07	1.15	0.37	]	
Peru	14(p)	-	-	-		13(14)	92.86	3.00	1.00	]	
El Salvador	23(32)	71.88	4.35	0.83		32(p)	-	-	-		
Venezuela	9(21)	42.86	4.33	0.50		8(21)	38.10	4.25	0.46	]	
Mexico	63(80)	78.75	4.51	0.50		63(80)	78.75	4.46	0.50	]	
Portugal	13	100.00	3.31	0.85		13(13)	100.00	3.46	0.52	]	

Table 3.23 Trends in the scope of the monitoring systems

(p) Missing values

The participation rate is more regular; Colombia was the only country to not respond. The participation rate was 62 % for the first variable and 74 % for the two remaining variables. The level of uniformity of responses is quite similar across countries; only Argentina, Uruguay and Peru had standard deviations above 1 for the balanced scorecard and annual reports. Additionally, the study further explored the use of an indicator system across the different institutional levels (Table 3.23).

Chile, El Salvador, Ecuador and Colombia did not provide data concerning the scope of strategy deployment. Among the participating institutions, the average participation varied from 15 % in Panama and 19 % in Venezuela. Uniformity of responses was very high with exceptions of Peru (1.31), Spain (1.36 and 1.39) and Uruguay (1.41). The overall mean values in the two cases (strategy deployment scopes) are high.

Concerning the tendency of conducting a comparison of the institutional progress by identifying the possible bias in the realisation of the strategic project, we observe a mean value around 3.7, which might reflect that the institutions do agree with this issue. Specifically, the case of Spain is particularly striking as HEIs presented a higher level of disagreement, as the individual mean was 1.40. The rest of the deviations are low revealing high homogeneity with the exception of Panama. Regarding the establishment of an indicator system specially designed for the strategy monitoring, the mean around 2.84 indicates that institutions do not quite agree with this aspect. Unlike the previous variable, very similar averages around 1 were found in Spain, Bolivia and Panama. The uniformity of responses is higher, and only in the case of Peru was the deviation 1.

#### 3.6.3 Systems of Feedback and Organisational Learning

Closely related to the effective use of monitoring tools, the processes of feedback and organisational learning are both key for improving the defined strategy itself and achieving an integral culture of planning, evaluation and management of quality. Having a periodic review procedure for plans and strategic directions is aimed at detecting whether the external scenario may have undergone significant changes and whether the internal environment contains factors making it easier or harder to attain certain objectives. In this context, the survey identified that HEIs in different countries conduct a periodic review of their strategic planning programmes (Table 3.24)

	Existence of a periodic review of the strategy development					How often the strategy is revised or updated				
Country	F	%	$\mu_{\rm i}$	$\sigma_{ m i}$	$\mu_{\mathrm{Total}}$	F	%	$\mu_{ m i}$	$\sigma_{ m i}$	$\mu_{\text{Total}}$
Spain	38(54)	70.37	3.76	1.05	3.91	39(54)	72.20	2.05	0.86	2.21
Paraguay	6(6)	100.00	3.67	2.07		4(6)	66.70	1.50	1.00	
Costa Rica	12(p)	-	-	-		12(12)	100.00	1.92	1.00	]
Uruguay	7(7)	100.00	4.29	0.49		7(7)	100.00	1.71	0.45	
Chile	15(18)	83.33	4.60	0.51		15(18)	83.30	2.33	0.72	
Argentina	14(14)	100.00	3.21	0.80		13(14)	92.90	2.15	0.90	
Bolivia	27(27)	100.00	3.89	0.80		17(27)	63.00	2.53	1.51	
Panama	27(27)	100.00	3.89	0.85		18(27)	66.70	2.00	1.33	
Peru	9(14)	64.29	3.78	0.83		13(14)	92.90	2.77	0.93	
El Salvador	23(32)	71.88	4.22	0.42		24(32)	75.00	2.00	0.89	
Ecuador	10(13)	76.92	4.40	0.52		2(13)	15.40	1.36	0.51	
Venezuela	11(21)	52.38	4.18	0.40		11(21)	52.40	4.09	1.04	
Mexico	77(80)	96.25	4.13	0.92		63(80)	78.80	1.81	0.97	
Portugal	13(13)	100.00	2.85	0.55		13(13)	100.00	2.69	0.86	

 Table 3.24
 Periodicity in the strategy revision processes

(n°) Number of institutions per country

(p) Missing values

	As a resu institutio opportun	lt of syst ns are ab ities	ematic le to suf	monitorii fficiently	ng, the seize	Degree of satisfaction with the monitoring and learning system					
Country	F	%	μ	$\sigma$	$\mu_{\mathrm{Total}}$	F	%	μ	$\sigma$	$\mu_{\text{Total}}$	
Spain	39(54)	72.2	3.44	.912	3.79	37(54)	68.5	3.59	.832	3.67	
Uruguay	7(7)	100.0	3.86	.378		7(7)	100.0	3.57	.787		
Chile	15(18)	83.3	4.20	.561		18(p)	-	-	-		
Argentina	14(14)	100.0	2.71	1.326		14(14)	100.0	2.86	.770		
Bolivia	18(27)	66.7	4.00	0.000		12(27)	44.4	4.00	0.000	1	
Panama	15(27)	55.6	4.27	.799		15(27)	55.6	3.87	.516		
Peru	13(14)	92.9	2.85	.899		13(14)	92.9	2.69	.630	1	
El	24(32)	75.0	4.21	.833		24(32)	75.0	4.33	.816		
Salvador											
Venezuela	7(21)	33.3	4.29	.488		21(p)	-	-			
Mexico	75(80)	93.8	4.08	.941		50(80)	62.5	4.48	.505		

 Table 3.25
 Satisfaction with monitoring systems and degree of utilisation of the improvements identified

(p) Missing values

where the institutions have responded with an average value of 3.91 suggesting overall agreement with maintaining a periodic review of the strategy development.

Moreover, individual mean values reveal uniformity with a minimum of 2.85 in the case of Portugal and a maximum of 4.6 in the case of Chile. Uniformity of responses across institutions was high with the exceptions of Paraguay (deviation of 2.07) followed by Spain (1.05) and Mexico (0.92). In other countries, uniformity is more regular with deviations between 0.42 and 0.85. According to these results, there is a trend of conducting a periodic review of the strategy programmes in the institutions of the region.

Regarding periodicity of revisions, institutions conduct the review process with a frequency between 1 and 2 years among 5 possible periods (between 1 semester and 1 year, between 2 and 5 years, more than 5 years and others). Venezuela responded with a mean value of 4.09, thus reviewing their strategy with a frequency of more than 5 years. Regarding uniformity of responses, countries were less uniform as seen in Bolivia (1.51), Panama (1.33) and Venezuela (1.04). In the remaining countries, deviations were smaller (except Uruguay to 0.45) and thus more uniform in the individual analysis of each country. The data provided insights suggesting that the trends in periodicity of strategy revisions are done in a short-medium term that comprises overall periods between 1 and 2 years.

Furthermore, the study sought to examine if the institutions effectively use the results of the revisions for improving the strategic development process as well as their satisfaction about the feedback process (Table 3.25).

About a third of the institutions surveyed did not answer these two questions. Moreover, with the sample of the institutions that responded, the level of responses was high with an average for both variables around 4, indicating that institutions agreed upon the degree of satisfaction about the utilisation of feedback being gathered. As for the uniformity of the responses, some countries were more scattered when examining the usage of monitoring results as was the case for Spain, Argentina and Mexico. On the other hand, a slight dissimilarity of responses for the degree of satisfaction with the feedback systems was observed in Spain and El Salvador. Furthermore, more uniformity was observed for the degree of satisfaction as the standard deviation does not exceed, in any case, 0.9. Examining the satisfaction rate in relation to monitoring systems and usage level for review processes in the implementation of the identified opportunities for improvement, we can infer that in many countries the level of satisfaction varies but highlights the need to employ more effective tools to more accurately and effectively identify opportunities for improvement and capitalise on them.

Meanwhile, change management and learning about the strategy process are not as obvious for many of the HEIs analysed in the various countries. Some of these review systems simply collect data and do not provide an overall perspective of the impact of the process on the institution; they also hinder improvement in strategic decision-making and organisational learning.

#### 3.7 Discussion and Conclusion

A central objective of this study was to provide insights into the types of strategic management processes in Ibero-American HEIs, acknowledging differences and similarities that might be present across the analysed countries. The discussion of the findings and further implications for practice and theory are presented in light of the research model used to support the analysis (Fig. 3.1). In order to exploit the strategic management types, the research model developed research variables addressing the process of the strategic management: 'process variables'. Moreover, aiming to contextualise the way the strategic management process might be influenced by different aspects, the research model developed 'context variables' in order to delve into this contextualisation. Accordingly, the discussion is divided into three main parts (strategic thinking and choice, strategy implementation and strategy learning) interplaying with the contextual elements identified, focusing on the specific aspects integrated with the research conceptual model.

#### 3.7.1 Strategic Thinking and Choice

Regarding the analysis on how strategy formulation is carried out at HEIs, the main points of convergence involve the existence of a culture of strategic planning in the development of strategic projects. As noted, the vast majority of the analysed institutions have a systematic process to formulate their policies and institutional strategies. From the descriptive statistics, universities across the region have mostly established strategic management processes. Existence of the process was considered positive with very strong ratings (>4). Regarding the components of these processes, conducting a comprehensive strategic diagnostic is more clearly identified in some specific countries, due to the fact that not all countries provided evidence about the way the strategic thinking and choices are drawn from the environmental analysis. Countries that positively viewed the build-up of a systematic analysis based on economic resources, environment, competitors and results of previous planning were Colombia, Bolivia and El Salvador (ratings >4), followed by Uruguay, Panama and Peru (ratings >3). These results support the problems found in the literature when conducting a comprehensive strategic design process: there is the need of integrating prospective techniques to elaborate better strategic scenarios and visualisation of alternative strategic options as well as identifying the primary stakeholders (CINDA 2007).

Likewise, strategising in universities has largely been devoid of the incorporation and analysis of context and process (Buckland 2009). The results of the inclusion and elaboration of this systematic analysis identify problems present in the region, as most of the countries did not respond positively to this variable. Moreover, a positive trend does emerge if we consider that half of the countries responded positively (>3) to this variable, but at the same time, the other half did not respond positively. Previous studies have considered strategic analysis as a key factor for a successful strategic design and furthermore considered strategic design as a key factor in strategy implementation (Rodríguez-Ponce and Pedraja-Rejas 2009). Correspondingly, the results of this comparative study highlight the need to heighten the strategic analysis dynamics presented across most of the countries in order to be able to make strategic choices based on institutional strengths and capacities, coinciding with the arguments proposed by Burquel (2012). Therefore, if strategic analysis is a key factor of successful strategic thinking and implementation (Rodríguez-Ponce and Pedraja-Rejas 2009), important flaws in this dynamic were seen in the results, fostering further important challenges.

Furthermore, by analysing the supporting tools used, we obtained better insights into the strategic analysis and choice dynamics. The results were divided into two groups: (1) popular tools (>3) and (2) less used and isolated tools (<3). The first case comprised tools such as the SWOT analysis (>4), market research, strategic scenarios planning and strategic maps (>3). As for the trends across countries, statistics showed that SWOT analysis (Hill and Westbrook 1997) was the mostly employed tool, as most institutions across all the countries rated it positively (>3). Concerning the other tools, we might see less uniformity in their usage. For instance, the use of scenario planning (Chermack 2005) was more pronounced in Paraguay, Chile, Bolivia, Venezuela and Mexico, and likewise, the development of strategic maps (Kaplan and Norton 2004) was also considered positively by institutions in Mexico and Bolivia, as well as in Portugal. The use of market research (McFadden 1986) presented a divergent perspective of responses across the countries, where some institutions considered its practice positively: El Salvador, Venezuela, Mexico and Portugal.

With reference to the second cluster of tools, we see the use of competitor positioning analysis (Porter 2008), stakeholder analysis (Savage et al. 1991), critical success factor analysis (Boynlon and Zmud 1984) and the construction of balanced scorecards (Kaplan and Norton 1996b); however, this latter tool was associated more with supporting implementation yet also mentioned in the design stage by institutions in Spain. In this second group of tools, we observe fewer responses, as few countries acknowledge its use. The case of Uruguay is the only country with a positive rating (=3) concerning the use of critical factor analysis, positioning analysis and stakeholder analysis. The overall results show a trend that the HEIs across the regions might draw their strategic analysis based on the implementation of the SWOT analysis and in some cases complementing it with other tools; however, a deeper analysis of the competitive analysis or the stakeholders' needs is still challenging. This might be associated with the results of Buckland (2009) arguing that universities might focus on a clear definition of stakeholders' needs and expectations and clarify who should take part in the definition of priorities. Therefore, an improvement of the strategic analysis dynamic would be an important issue in offering improvements to this problem.

The use of strategic plans is quite popular in many of the analysed contexts explored by the temporary nature of the strategy planning processes. As such, strategic planning appears to be the main management tool used by HEIs in the region in their strategy formulation, which follows a trend explored in the literature (Dooris et al. 2004). We may observe that this practice is more mature in one group of countries, given the longevity of their planning programmes. The results suggest three groups of countries based on the development of their planning cycles: (1) more established experience, (2) in the process of being established and (3) recent initiatives.

The first group with more established experiences where many institutions (>50 %) have completed more than three planning cycles included Ecuador, Mexico, Chile and Venezuela. Many of these countries, as well as those in the second group in the process of establishing their strategic management processes (i.e. countries that have completed two or three cycles), appear to have made achievements in certain areas of the institution reporting that strategic planning helped them to improve different areas of the university management. However, there is no clear indication of the direct impact of the consecutive plans on institutional improvement. One question that should be asked is: what significant, tangible progress has been made by institutions in countries with more experience? This aspect has been explored in terms of how HEIs conduct dynamic monitoring of strategic developments and how the strategy and decision-making processes receive feedback and how learning takes place. As for the third group of countries (recent initiatives -2cycles or less, >50 %), we might observe the cases of Panama, Bolivia, Argentina and Portugal. Comparatively, when contemplating the factors that may have affected the continuity of cycles using the contextual variables (open questions), points of convergence among public HEIs (in countries from the three groups) relate to government funding, quality accreditation and institutional recognition. The continuity of the cycles at private institutions could converge in some of these dynamics, although their influences are less visible and more individualised.

Moreover, previous studies identified that decision processes in HEIs are slow and people in management positions have no professional training (Schwartzman 1996). Bearing in mind that most of the countries in the Ibero-American region account for a collegial model of governance (Brunner 2011), the results have shown that this may lead to the use of external consultancies when formulating strategic programmes. Given the comments provided, the management positions are seen within the collegial model as a temporary position, therefore not professionalised. Accordingly, the top management team, when assuming its mandate, has the option of hiring external consultants to support the strategic design and choice process. This trend was more clearly identified by the positive ratings (>3) in the cases of Venezuela, Mexico, Colombia and Portugal.

The trend for governance over universities revealed strong leadership at the top level of the institutions (De Boer and File 2009). This tendency is also observed across the countries analysed. Most of the institutions reported strong ratings (>4) when considering the leadership of the top management team in strategy formulation, design and choice. The participation of other stakeholders, such as faculty, representatives of external community or representative of students, was lower or not mentioned. This may put forward the problems found in the literature that when exploring strategies in universities, the institutional vision is not aligned with academic management and resources and academic management is decoupled with environmental and contextual needs and demands (Samoilovich 2008). These results put forward the challenge faced on two fronts: the enhancement of contextual analysis for better strategic positioning and choice and the superior improvement of stakeholders' identification and definition of participation in strategy design.

In this respect, creativity and flexibility are necessary to realise the vision, which also necessitates new tools, ideas and ways of doing things. Although the concept of innovation is not frequently mentioned in the various national studies, it requires a level of thought and learning that challenges the idea of being consistent with the past (continue what we already do well), as could be said of the current practice of strategic management in many contexts. Hence, an exhaustive analysis should take into account the competitive advantage, in connection with the institution-specific resources and capabilities.

#### 3.7.2 Strategy Implementation

The aspects measured for implementation explored issues of shared governance and teamworking, operationalisation of strategy, leadership role, supporting tools and communication systems. One aspect examined was the operationalisation of institutional strategy within the institutions. The statistics revealed that few institutions across the countries recognised that strategy is operationalised in their internal units. For instance, only two countries (Spain and Panama) reported clear positive ratings for this question. This raises one important aspect of the planning process within collegial governance institutions regarding the issue of legitimisation

(Caulfield and Minnery 1994; Gordon et al. 2009). Previous studies in public organisations acknowledge that in order to be able to understand change, it must be connected to issues of power and legitimacy.

The very aspect of legitimacy is relevant for understanding planning in this context. Moreover, one aspect of the concept of autonomy in HEI governance (mostly collegial models) is the legitimisation of strategic plans using increased participation of the university community in general, recognising the need for consensusbased, transparent decisions. Nonetheless, statistics showed that strategic plans are usually formulated by a group of senior executives that in many cases do not involve other participants in the process and cannot or fail to properly communicate the plan. So, results suggest that the leadership of strategy is centrally managed and top-down, with few initiatives taking place in an emergent participatory approach. Therefore, using the planning system as legitimisation of the strategic choice seems to put forward challenging perspectives across the countries when dealing with implementation improvements from the perspective of legitimising strategy choices and change. This challenge may be tackled with different forms of consultation and practical applications in managing the strategic process that must capture the visions and objectives aimed at shifting the focus from the development of strategic plans to the design of the innovative strategy (Martinez and Wolverton 2009).

On the other hand, when examining the distribution of responsibilities and the degree of knowledge about the authorities and functions of people involved in strategising at the different institutions, a positive trend was seen as most of the institutions reported strong positive ratings (>4) for the functions and responsibilities being well set and understood. A group of countries did not provide data for this aspect (Paraguay, Costa Rica, Ecuador and Colombia), and two countries rated it negatively (>3, Argentina and Portugal). However, the rest of the analysed countries provided overall positive ratings. Previous studies put forward that collegial models of governance normally imply the existence of co-democratic governments and bureaucratic management structures (Brunner 2011). The results showed that the responsibilities within the strategy activity seemed to be well set with a positive trend within these co-democratic structures; however, from the analysis of the participatory levels and the operationalisation of the strategy among the institutional units, some relevant flaws emerge in the strategy implementation as well as the clear need to clarify who the stakeholders are and emphasise legitimisation.

Moreover, strategy communication and legitimisation were treated as key factors when examining the strategy implementation process within the institutions across countries. Previous studies have explored the importance of strategic leadership in communicating the strategy to achieve an effective strategic planning process (Morrill 2010). The results of the present study supported a positive trend across most of the countries for concern in establishing a two-way communication process to promote their strategic programmes. However, it was only rated strongly positively (>4) in Chile and Mexico and some countries did not provide answers to this variable (Paraguay, Costa Rica, Argentina, Ecuador and Colombia).

Furthermore, in trying to get more insights into these communication systems initiatives, the study explored its evaluation from the perspective of the institutions.

As such, the participation rates decreased and, when considering only the responses that reached a participation rate >50 %, most of the countries did not reach positive ratings (<3) with dissimilarity of responses. Therefore, these overall results put forward that the universities are concerned with establishing communication initiatives; however, there is less concern for assessing if it has been effectively conducted.

One aspect that might be associated with the strategy communication problem is the research field that has dealt with implication and motivation of the middle management position (Guth and Macmillan 1986; Wooldridge and Floyd 1990). This issue has not been extensively studied in the context of HEIs, but considering the co-democratic government and pluralistic contexts that characterise the universities, this is a relevant aspect to be further explored. Accordingly, the study examined the supporting tools that aimed at both yielding the strategy across the organisation and identifying academic managers in different organisational roles.

The statistics showed that the use of management by objectives was overall strongly positively rated (>4), with the exception of Spain and Colombia. Institutions mostly coincided in integrating different tools such as the constitutions of improvement groups (except in Uruguay, Colombia, Argentina and Peru, >3) and balanced scorecard (except in Spain, Uruguay, Argentina, Peru, Colombia and Portugal). The trend in the use of improvement groups was mainly associated with quality management programmes in many of the countries analysed; the common trend was to include quality groups as part of the organisational strategy; however, the study did not explore the impact of these tools in fostering better communication impacting different academic managers at various organisational levels – a suggestion for future research.

Furthermore, the study explored the main drivers and barriers for successful strategy implementation. Several authors provided different drivers and barriers towards the strategy implementation in different organisational contexts, and according to Pearce and Robinson (2005), the first concern is the organisation's structure, which should be aligned with the strategy. Next, organisational leadership plays a role when implementing a strategy. Stone et al. (1999) summarise the following determinants of implementation activities: leadership behaviour, structure of authority, values, and their interactions. Lewis et al. (2001) emphasise the delaying effect internal and external stakeholders can have upon the implementation of a strategy, especially within an NPO. And within the field of human resources, there should be a relationship between an organisation's strategy and the use of its human resources (Lee et al. 2010). The concepts of systems (Higgins 2005), shared values (Jooste and Fourie 2009; Sharp and Brock 2011) and style (Jooste and Fourie 2009; Hayes 2010) were particularly emphasised in this study's results.

Higgins (2005) refers to 'systems' (and processes) as the facets which enable an organisation to get things done day to day (e.g. information systems, performance measurement systems). Regarding the drivers and barriers for the effectiveness of systems in the implementation process, the results showed that factors such as scanty methodological support for managing the process, infrequent monitoring and inefficient communication systems were the mains barriers faced by the institutions across countries. Efforts to reduce these barriers are needed. Likewise, 'style' is

centralised around leadership. A strategic leader has many tasks, but concerning strategy implementation, the most important issues are motivating people and communicating knowledge concerning the strategy (Hayes 2010). The statistics showed that committed leadership was the strongest rated aspect (>4) across countries as the most important driver of successful strategy implementation. Results also included achieving a remarkable integration of teams and individuals, as well as clearly identifying people's commitment.

As for the 'shared values', Sharp and Brock (2011) defined it as 'compensatory participation' and 'organisational interpretation'. Compensatory participation refers to the changes that occurred in the organisation's policy and attitude towards participatory behaviour. Participation is considered a key value in NPOs (Stone et al. 1999; Weisbrod 1998). The NPO value system is largely characterised as democratic (Courtney 2002) sharing some characteristics within HEIs. However, the strategic planning process tends to challenge these values and mode of operation. Organisational interpretation means that the entire organisation needs to shape the strategy process and the outcome of the organisation's strategy. Accordingly, the results revealed shared strategic vision was a key driver (>4) in successfully achieving implementation, which was also mentioned as a barrier when partial visions take place. Total alignment and integration of teams were also mentioned as key drivers of implementation, reinforcing the relevance of the shared values in dynamic strategy implementation.

#### 3.7.3 Strategic Learning

In the literature, the concept of strategic learning is closely associated with strategy implementation issues and communication systems. For instance, the quality of learning is an important aspect in driving an effective strategic management system (Beer and Eisenstat 2000). The quality of learning is related to the issue of vertical communication, and if it is blocked or lacking, it has a particular pernicious effect on the organisation's ability to implement and refine its strategy and consequently to learn. Often, strategic planning documents went into great detail on long-term technology trends, customer buying behaviour and the competitive environment, but failed to communicate a coherent story explaining why the changing world outside the organisation demanded new ways of working together (Floyd and Woolridge 1992). Other aspects that might be associated with this issue are the use of tools to support the monitoring of the strategy advancements, as in the case of the balanced scorecard methodology (Kaplan and Norton 1996a, b) and the concept of the learning organisation (Crossan et al. 1999; Preskill and Torres 1999; Gill 2010).

Therefore, when exploring the characteristics of the monitoring systems across the different countries, with the exception of Colombia, Ecuador and Argentina, all the countries provided data for the existence of a system to monitor implementation. In the case of Spain, the response rate was very low, and the dissimilarity of responses in Paraguay, Costa Rica and Uruguay does not permit clear conclusions. This suggests that establishment of monitoring systems is a flow issue for strategic management systems. The rest of the countries provided positive responses to this aspect (>3). Furthermore, when examining which tools comprised their monitoring systems, we were able to gain deeper insights. For instance, the trend in the use of the balanced scorecard as a strategic management measurement tool was only clearly identified in Costa Rica, Chile and Panama, where more than 50 % of the sample positively rated the use of this tool (>3). Overall, annual reports and the indicator systems were the most frequently used tools.

Regarding the effectiveness of these tools, HEIs rated their satisfaction with the monitoring and learning systems in place and whether opportunities were sought and implemented as a result of revision processes. Only two countries (El Salvador and Mexico) reported strong positive satisfaction with their monitoring and feedback process (>4), followed by Spain and Panama (>3). As for the learning aspect, nearly half of the countries rated taking advantage of the aspects identified in the improvement process very positively (>3 and >4). Peru and Argentina responded negatively to this issue (>3) and a group of countries did not provide support for this aspect (i.e. Colombia, Costa Rica, Portugal, Ecuador and Paraguay). Some challenges are brought forth when establishing a system that would enhance quality learning, as well as establishing supporting tools able to integrate better strategy implementation and strategy learning.

In conclusion, some recommendations for future research can be proffered. First, from a practical point of view, the examination on the use of management tools and the development of strategic management processes in the Ibero-American countries require consideration with regard to the lessons that can be learned and the challenges that must be addressed, in order to find innovative ways of implementing the strategy.

These challenges involve clear trends in terms of how to increase the level of professionalisation in university administration, maintaining a balance between the functions of the academic manager which is closely related to the changes and progress in the governance models proposed in the political discourse in many of the countries analysed. And finally, an equally important challenge is to develop effective monitoring of performance and improvements in the strategic planning process by drawing on organisational learning.

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# Chapter 4 Best Practice in University Strategic Management's Conceptual Framework

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**Abstract** This article brings forward a definition of best practice (BP) in university strategic management, drawing upon the European Foundation for Quality Management's (EFQM) model, exploring the potential contribution of the EFQM model in assessing best practices in the context of university management. The article proposes a conceptual framework that aims to identify, assess and accredit best practice. This conceptual model includes the definition of the requirements needed and the assessment dimensions and focuses on the content of good practice: its deployment, impact and the results provided, its evaluation and revision, its innovation and replicability and the various benefits of its accreditation.

**Keywords** Best practices • University management • EFQM • Quality management • Accreditation

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### 4.1 Introduction

Continual improvement has been an enduring concern throughout the history of human development, both at the level of individuals and organizations. It is also a current concern of higher education institutions (HEIs),<sup>1</sup> and although it is assumed that the academic activities being conducted within HEIs should bring excellence with them, in the field of the strategic management of higher education institutions, there is still a long way to go. It is this concern for achieving excellence that has driven institutions to find reference points in organizations that have achieved success in some aspects of their management systems and to identify good practice that can be extended and implemented at other universities.

Therefore, this chapter reports on a methodology for the identification and implementation of best practice in university strategic management, with the understanding that its monitoring and enforcement will significantly contribute to improving the efficiency of higher education systems at a more general level, and at the individual level, it may contribute to the pursuit of the excellence so characteristic of universities.

Accordingly, this article is in two parts. The first part brings forward a definition of best practice (BP) in university strategic management, drawing upon the European Foundation for Quality Management's (EFQM) model; it explores the EFQM model criteria and its "radar evaluation system" as well as the potential contribution of the EFQM model to this type of assessment. The second part provides a description of the proposed conceptual framework that aims to identify, assess and accredit best practice. This conceptual model includes the definition of the requirements needed and the assessment dimensions and focuses on the content of good practice: its deployment, impact and the results provided, its evaluation and revision, its innovation and replicability and the various benefits of its accreditation.

#### 4.2 EFQM Model as a Tool for Identification of Best Practice

#### 4.2.1 An Approach to the Definition of Best Practice

The concept of best practice (BP) originated in the private sector as a tool to benchmark performance against competitors, which would thereby stimulate an improvement in the performance of the organization. The term has entered into use in the public sector, especially in the United Kingdom, particularly as an aspect of the reforming agenda of public management, which has preoccupied successive

<sup>&</sup>lt;sup>1</sup>For the purposes of this chapter, the concepts of "higher education institutions" and "universities" will be used interchangeably. This does not mean that they should be taken as synonymous concepts, given the fact that both concepts are widely known and characterized within the specialized literature, including the various national and regional systems of higher education. It is simply applied to facilitate the reading of the text.
central governments. Within the context of the public management rationale, the concept of best practice is that local authorities looking for solutions to problems can get ideas and learn lessons from other authorities facing the same problems. As such, they can avoid "reinventing the wheel" and reduce the cost and effort required to develop solutions "from scratch" by learning from the experiences of others. However, BP suggests something more than spontaneous horizontal learning; rather, it suggests the notion that particular practices are designated and held up as exemplars for others to emulate, which implies a structured and systematic process coordinated by a central body.

Additionally, "practice" may be considered to be within the realm of performance management, which represents a more subtle means of exercising central control than explicit targets and inspection measures. In this vein, Newman et al. (2000) identified a virtuous cycle of BP in which innovation is stimulated, identified and then disseminated by central government, leading to widespread improvement. They defined BP as "the adoption of something tried and tested" (Newman et al. 2000, p. 20). Furthermore, the concept of BP draws on two fields in the literature: the first is concerned with innovation and diffusion (Gray 1973; Rogers 1995; Walker 1969: Weinert 2002) and the second is concerned with policy transfer (Rose 1991, 2005; Dolowitz 2000; Dolowitz and Marsh 1996). In the first case, the literature provides aggregate-level analyses of the adoption of new practices over time and across a group of organizations, which in the second the set of literature is commonly drawn upon in exploring and assessing the BP processes. Specifically, in the field of higher education institutions, there are scant examples of studies found in the literature that provide analysis of the processes of BP definition, generation, dissemination and adoption.

We have also searched for definitions of BP at the level of organizations and associations related to the field of higher education, and we have included here two complementary approaches. The first is provided by the *Club de Excelencia en Gestión* (Excellence Management Club) representation in Spain of the EFQM Excellence Model,<sup>2</sup> which defines BP as "approaches, policies, processes or methods that lead to outstanding achievements". Since it is difficult to define what is "best", most organizations prefer to use the term "best practice". And among the ways to identify BP outside the organization, it is common to use techniques such as benchmarking and external learning.

The other definition is provided by the *Telescopi* Network, which has adapted the definition of the Excellence Management Club, referring to BP as a

set of principles, measures, actions and experiences that, having generated advantages of a different type (economic, social, satisfaction, etc.) for the organization, in a verified and proven manner, can be considered as potential models for extending the improvement to other organizations. For that, it must have completed the cycle of planning, implementation, review and improvement, which allows it to be considered as sustainable; moreover, it must be valid at the time of the presentation. (Red Telescopi 2012)

<sup>&</sup>lt;sup>2</sup>EFQM Model 2013 ©EFQM (2012). See: www.clubexcelencia.org

### 4.2.2 The EFQM Excellence Model

The European Foundation for Quality Management (EFQM) was created in 1992 with the aim of providing a set of criteria that would help organizations to be more competitive. Its forerunners were the Japanese model based on the Deming Prize of 1950 and the US Malcolm Baldrige model of 1987. EFQM has 500 members in more than 55 countries and provides a unique platform for organizations that want to learn from each other and improve their performance. The EFQM Excellence Model was created by the foundation, with its last version in 2013; it is an aid to organizations whose main objective is the pursuit of sustainable excellence.

The model is based on a set of European values embodied for the first time in the European Convention on Human Rights (1953) and the European Social Charter (revised 1996) and assumes that all outstanding organizations respect and comply with the 10 principles of UN Global Agreements. The model provides a framework and language that facilitate the effective exchange of information between public organizations, regardless of sector, size, structure or maturity. The EFQM model is a practical, non-prescriptive tool that enables organizations to assess where they are on their journey to excellence, which helps them to identify their key strengths and the potential gaps, as well as put in place a basic structure for their management systems. The EFQM model presents three main components: (1) Fundamental Concepts of Excellence, (2) conceptual framework and (3) RADAR logic assessment framework.

The Fundamental Concepts of Excellence are the basic principles that describe the essential foundation for any organization to achieve sustainable excellence and provide a common language for senior management. These fundamental concepts can be seen in Fig. 4.1.



Fig. 4.1 Fundamental concepts of excellence (Source: Adapted from EFQM Excellence Model 2013)



Fig. 4.2 The EFQM Excellence Model conceptual framework (Source: Adapted from EFQM Excellence Model 2013)



Fig. 4.3 The RADAR logical scheme (Source: Adapted from EFQM Excellence Model 2013)

The EFQM conceptual model described in Fig. 4.2 helps organizations to realize in practice the Fundamental Concepts of Excellence and to understand the causeand-effect relationships between what the organization does and the results it achieves.

The last component is the RADAR (results-approaches-deploy-assess-refine) logic, which is a management and evaluation tool for analysing the performance of an organization (see Fig. 4.3). It is used as an underlying basis of the scoring system of the EFQM Excellence Award and can help to lead changes and manage improvement projects.

#### 4.2.2.1 The EFQM Excellence Model Criteria

The EFQM Excellence Model is also a self-assessment model for an organization that wants to assess its level of excellence. It is based on nine criteria (indicated in Fig. 4.2), five of which are called "enablers", which relate to what the organization does, and four are termed "results", which deal with what the organization has achieved and how. The results criteria are a consequence of the enablers criteria, and both of them, within a feedback dynamic, are improved by using the information from the results. At its base, creativity and innovation help to improve the enablers which, in turn, lead to the improvement in results. Each criterion contains a number of sub-criteria, including the elements that need to be considered for the organization to achieve excellence in its business, and which are indicative of what can be considered good practice; these are further evaluated using the RADAR logic assessment framework.

#### 4.2.2.2 The RADAR Logic

As previously mentioned, RADAR is a management tool and a structured way to evaluate the performance of an organization. According to this tool (see Fig. 4.3), every organization needs:

- To establish the *results* that need to be achieved
- To plan and to develop an *approach* that is solidly based and integrated, which supports the organization in achieving the required results now and in the future
- To deploy a systematic approach to ensure its implementation
- To *assess*, revise and *refine* the deployed approaches based on the monitoring and analysis of the results achieved and ongoing learning activities

Based on this logic, all of the five enablers criteria are assessed considering the approach, deployment, evaluation, review and improvement. The four results criteria are used to assess their level of relevance and usefulness, plus performance. The final total score uses a scale distributed from 0 to 1,000 points, as shown in Fig. 4.4.

# 4.2.2.3 The EFQM Excellence Model and Its Application Within the Higher Education Sector

When venturing into the managerial and administrative aspects of higher education institutions, the nature of the business generates widespread attention and numerous discussions. In search of answers, HEI researchers often find polarized attitudes: on the one hand, there is a line of thought that conceives of universities as businesses, and as a consequence they must therefore be managed according to the models, tools and techniques provided by the business management field. According to the



Fig. 4.4 Learning, creativity and innovation (Source: Adapted from EFQM Excellence Model 2013)

opposite line of thought, the HEIs are considered as *sui generis* institutions, and such models, tools and techniques have a scant contribution to make to their governance and management. At most, granting them limited validity, these tools are recognized to be useful for managing the affairs of the administrative and financial offices of HEIs. To address these positions, it may be recognized that the university has its business component, but at the same time it is a social institution. We should understand the university as a business, not only in the exclusive economic sense but also in a way that takes into account the collective and coordinated activities that are organized to achieve specific goals and purposes, which are carried out with efficiency and to a consistent quality; therefore, universities belong to the large genus of human endeavours.

This vision of the HEI as a business embeds the following key features and activities:

- Its activities are undertaken in pursuit of accurate and clear objectives that have previously been identified.
- It is a collective activity of a group or assembly of people—faculty and students—for the pursuit of a common purpose.
- It is also an organized activity, which is divided into internal systems and bodies that have specific functions and objectives, which individually and collectively support the generation of the institutional purposes of higher education.
- Its activities are oriented to specific purposes (results) in order to preserve, develop and disseminate training, knowledge transfer and regional engagement throughout its activities of excellence.

However, universities are more than just businesses. Within the perennial historical validity of their missions and functions, their peculiar autonomy is based upon the power of knowledge and also of being indispensable to social life, and universities are positioned within a higher category of institution. Considering these previous assumptions, it might be suggested that the models, tools and techniques of business management might be suitable for application to HEIs. The particular conditions that allow and force us to recognize the HEIs as businesses should be identified, and HEIs should be elevated to the status of social institutions that are therefore decisively committed to business excellence. Consequently, the EFQM Excellence Model can become one of the models of management and business assessment that might help HEIs in seeking to preserve, develop and disseminate knowledge, training and regional engagement with sustainable excellence.

With regard to the analysis and systematization of the practical experience of the application of the EFQM Excellence Model within the HEIs, studies have acknowledged that the main motives for HEIs to apply the EFQM model are related most commonly to internal institutional needs, competitiveness in the market and the requirements of stakeholders (Allur 2010; Davies et al. 2007; Hides et al. 2004; Kasperavičiūtė 2011; Osseo-Asare et al. 2002; Steed et al. 2005; Tari et al. 2011). The implementation of the model within the HEIs gives rise to benefits linked with internal institutional changes. The most significant general benefits identified were related to the goals and cultural changes to the institution. These studies were mostly associated with the uses of the model in supporting the improvement of quality management in different institutional areas. Notwithstanding this, few studies can be found that acknowledge the application of this model as a framework for assessing best practice in different areas of the management of HEIs.

Osseo-Asare et al.'s (2005) study explored the adoption of the EFQM model in the assessment and improvement of leadership performance with regard to academic excellence. In their study, the authors identified and categorized leadership practices into *weak*, *good*, *best* and *excellent* on the basis of the efficiency and effectiveness of each practice in sustaining academic quality improvement, which provided a conceptual framework for improving weak leadership practices. Furthermore, Calvo-Mora et al. (2006) have explored the implicit relationships among enabler agents of the EFQM model to serve as a framework for the management and improvement of the quality of higher education institutions. Their findings support the role of enabler agents as a basis for establishing a management model that leads universities towards excellence.

Concerning the relevance of the use of the EFQM model by HEIs, it is interesting to observe that according to the European Foundation for Quality Management (EFQM), more than 30,000 organizations worldwide are using the EFQM Excellence Model (EFQM 2012). The diffusion of the use of the EFQM can be observed through the number of the EFQM members and recognitions. According to the EFQM, the most EFQM awards were issued to the United Kingdom (44), Spain (33), Germany (26) and Turkey (21) between 1992 and 2006 (Allur 2010). In comparison, between 2006 and 2013, the highest numbers of recognitions (EFQM Recognition) at all levels were issued to Spain (889), the United Kingdom (320), Germany (174), Switzerland (139) and Colombia (130). EFQM has provided the

names of the recognized education sector institutions that are members of the EFQM: 720 educational sector institutions achieved various recognitions between 2006 and 2013. Based on the EFQM member lists for 2011 and 2013, HEIs represented 50 % of about 50 (10 %) education sector institutions of more than 500 members in 2011 and 70 % of 49 (11 %) education institutions of 444 members in 2013 (Kasperavičiūtė 2011; EFQM list of members).

Given this context, in Spain for instance, from a more practical perspective, since 2003 the universities belonging to the Excellence Management Club Universities Forum have developed different adaptations of the EFQM assessment criteria and concepts. These are mainly focused on adapting its concepts, management and organizational elements; they have also focused on identifying stakeholders according to their specific needs and expectations and their unique processes and hence the identification of concrete results at the level of the whole institution, their units and the idiosyncrasies of the university management services.<sup>3</sup> Similarly, the EFQM model has been adapted by the Telescopi Network in terms of exploring the cause-and-effect relationship of enablers and agents on results that may support the achievement of the mission and the goals and purposes sought by institutions of higher education with sustainable excellence.<sup>4</sup>

## 4.3 Identification, Assessment and Accreditation of Best Practice: Proposed Framework

Reflecting the previous revisions in the EFQM Excellence Model for use in HEIs and based on the proposed concepts and the different components of the EFQM previously discussed, this section will develop the use of different concepts and elements of the model and propose a conceptual framework to be used as a tool for the identification of best practice in the different areas of university management.

# 4.3.1 Best Practice in University Strategic Management: Basic Requirements

The first element of the framework to be considered is the necessary or basic requirements that the practice is obliged to satisfy. The most important considerations in formulating the requirements are as follows:

1. The actions it comprises must pertain to the field of HEI management. As such, BP should make an impact in an area or activity or institutional process that is meaningful and significant, but it should also be appropriate for realizing the mission and the institutional education project.

<sup>&</sup>lt;sup>3</sup>See: http://www.clubexcelencia.org/Portals/0/boletin/bu6\_nueva\_version\_perfil.pdf (in Spanish).

<sup>&</sup>lt;sup>4</sup>See Telescopi Excellence criteria: http://telescopi.upc.edu/bdcasos/ (in Spanish).

- 2. Their ultimate purpose is the pursuit of excellence, which is expressed through the quality and suitability of the management as follows: the quality in terms of reaching the highest comparative levels of institutional efficiency and suitability with regard to efficiency in achieving the services, products and results that society expects of HEIs in their mission-related activities of training citizens, generating knowledge and applying and transferring knowledge within society.
- 3. Their implementation at HEIs must be systematic, that is, have undergone a process of planning, execution, evaluation and review conducted with regard to their results and impacts, which are observed to verify if the practice was successful.
- 4. The evaluation of the BP should express or establish a causal relationship between the positive and favourable impact of the BP and the outcomes or solution to the problem it aimed to solve. It is advisable to disregard assessments that conclude with a simple affirmation of good intentions or of the disposition of the BP to achieve the expected result when it does not actually reflect the way it turned out, and cases where results derive from causes that are unrelated to the direct impact of the BP on that specific problem. In the latter case, we can identify various solutions to institutional problems derived from environmental factors—within and beyond the institutional capacity to generate them—such as a change of legislation, a sudden shift in the trends in the education market or an alternative source of public resources arising from a public policy option. In fact, care must be taken when identifying the indirect outcomes of other institutional actions in solving the problem as these can occur contemporaneously with the application of the analysed BP.
- 5. The validity of the BP, also expressed as its longevity either in terms of its ability to be implemented or of operating in a permanent and self-sustaining manner at the institution in a way that prevents the initial problem from recurring or because, after application, it is assured that the problem will not resurface.
- 6. The BP should work on solving a problem or contributing to continuous improvement or the development of a current project. Consideration should not be given to BP related to issues that will become obsolete over time; that is, if actions are successful, then the problem they resolved will no longer have a significant value for the HEI or will cease to be an issue, given the knowledge acquired between the institutions or the practices commonly implemented in management. In this area, it is easy to identify BPs associated with the changing technological aspects of institutional management.
- 7. The BP should be evaluated positively for its efficacy in terms of the established objectives, its efficiency in the use of resources and its effectiveness in solving problems. A best practice initiative, experience or programme can be considered unsatisfactory if it is effective in finding a solution to an institutional problem, but is inefficient due its demand for a great amount of human, technological and scientific resource, since by creating the solution, it is simultaneously creating a new and different institutional problem.
- 8. The BP can be emphasized for its sustainability within the institution, for its being replicable with respect to its potential transferability to other units or institutions (flexibility and adaptability) and for its innovativeness in terms of the impact on learning new forms and styles of working in the institution itself.

- 9. One fundamental requirement of a BP is its originality and that there is sufficient evidence of its application and contribution to the development of the institution. The originality of a BP means that it is the first among others that follow it and not merely a copy, repetition, imitation or variation of other practices implemented by the same institution or others, unless it is implemented in the context of a real and brand-new application. For example, a new version of a technological development that generates marginal results, or takes care of a difficulty outlined in its previous iteration, would not constitute a best practice.
- 10. The BP should be public; in other words, it should be able to be learned in depth and applied by another institution. One important aspect of this requirement that should be clarified is the capability of the BP to be public in terms of the initiative, experience or programme and in terms of the outcomes and information generated. However, there could be a BP that, while public in its application, generates information considered as classified, since it constitutes a competitive advantage for the institution. The ideal situation is for both aspects to be conveyable to the public. If this is not the case, the fact that the BP generates confidential information should not limit its transfer to other institutions; if it cannot be transferred, it will not meet the requirement for being public. In this event, a fundamental role will be played by mechanisms for evaluating the quality of the results, because it will not have elements for comparison. Another critical aspect of its public nature is whether the BP transfer is gratuitous. If the experience, model or programme is copyrighted in such way as to warrant a licensing fee, then for the purposes of a university network, it will not be considered a best practice, regardless of its merits. This does not preclude-unless it is an absolute requirement-the possibility of achieving a better transfer of the BP by using the advisory or consulting services of the institution that developed it. In that case, hiring the advisory or consulting services should be an act of liberality by the institution that aims to replicate the BP.
- 11. The BP should take account of some of the criteria for excellence related to the EFQM model.

# 4.3.2 The Adaptation of the EFQM EM Concepts to the Assessment of HEI Management Best Practice

The standard concepts and elements of the EFQM model are simplified when adapted from the business world environment for implementation in the higher education sector, especially in terms of using them to identify best practice. Therefore, what follows describes the effort of adapting the aspects of business language to the meanings and characteristics of university management models. Specifically, the conceptual framework for the identification of best practice proposes the consolidation of the nine criteria of the EFQM model (see Fig. 4.2) into seven. This is done by merging the results (results in people, in customers, in society and key results)

for people and customers into a single criterion referred to under the generic term of "customer results". Therefore, it is recognized that HEIs are distinctive as the recipients of university services and activities and are at the same time both talent generators and customers of the institutional service. In addition, the key results are also consolidated into the two sets of results for "results in customers" and "results in society", with the understanding that the results for these groups are understood as the key results of the institution.

Consequently, taking into account the proposed consolidation and its application to HEIs, the concepts of the EFQM model can be defined as set out in the following.

*Leadership* The approach to leadership seeks to identify the practices in which the leaders visibly demonstrate their commitment to the culture of excellence and promote and facilitate the achievement of the mission and vision of the institution. Leaders also develop the values required for long-term success, balance the needs of all stakeholders in the planning of current and future objectives, effectively manage the necessary changes and act as reference models generating a culture of involvement and responsibility.

*Strategy* This criterion aims to identify practices by which the institutions demonstrate how they implement their mission and vision and develop a strategy clearly focused on stakeholders; it also covers how they develop and deploy policies, plans, objectives, goals and processes that are relevant for realizing the strategy.

*People* The approach to people seeks to identify practices in which the institutions demonstrate how they develop and agree on performance indicators based on people's needs and expectations to determine the success of the deployment of their strategy and support policies. It also shows how the HEI can create a culture that develops and values the dedication, skills, talents and creativity of people, thereby ensuring optimal use of the knowledge and potential of the people who comprise it, at the level of the individual, the team or the institution as a whole.

*Partnerships and resources* The approach to partnerships and resources seeks to identify the practices by which the HEI demonstrates how it plans and manages the institution, its internal and external partnerships, suppliers, internal resources and processes, based on reporting systems to support the deployment and implementation of the general strategy and its support policies, as well as the effective functioning of its processes.

*Processes, products and services* The approach to these seeks to identify practices in which the institutions demonstrate how they design, manage and improve the processes, products and services inherent in their substantive functions of teaching, research and the relationship with the environment, strategically aligning them according to decisions based on facts and data. The aim is for balanced and sustained results and to create increasing value for their clients and other stakeholders.

*Customer results* This criterion aims to identify practices in which institutions demonstrate how they develop and agree on a set of performance and result indicators based on the needs and expectations of members of the university community and other stakeholders in the institutional action, and to determine the success of the deployment of its strategy and support policies aimed at anticipating the future performance and outcomes.

*Society results (social responsibility)* This criterion aims to identify practices in which institutions demonstrate the integration between the institution and the relevant external stakeholders, highlighting the systems developed to promote a culture of social outreach, environmental management, good corporate governance and the development of actions aimed at promoting a culture of quality, so as to ensure a successful deployment of the institutions' social and environmental strategy and their support policies.

# 4.3.3 The Establishment of the Best Practice Identification and Validation Process

The identification of a BP is not a simple issue originating from the institution that developed it, nor is it a process carried out by an auditor who prepares and completes a checklist. For its identification, a BP requires the construction of a complex and enlightened judgement, which may only be given by someone whose knowledge and experience in university management embodies the paradigmatic conditions necessary for a person to be considered an expert peer reviewer.

A few basic stages help constitute this expert value judgement:

- Complete and substantiated presentation of the BP by an applicant institution.
- Assessment of the BP's repository by the coordinating institution to determine the fulfilment of the basic requirements; if the experience is considered a BP, it moves on to the expert committee for validation.
- Evaluation and validation of best practices by the expert committee; if the BP is accepted, it will be added to the bank of experiences.

In summary, in the process of evaluating and validating BPs, the following criteria and evaluative aspects should be taken into account as value dimensions: the approach, implementation or deployment, results, internal process for evaluation and review, innovative nature and replicability of the practice.

*Approach of the practice* This criterion is used to assess the description of the initial situation, its context and objectives as well as the justification of the need for the practice, the level of integration in the context and the value added. To that end, the following aspects are taken into account:

• The description of the initial situation, the context, the reasons underlying the need for the BP adoption and its alignment with the university's strategies, as well as with the environment and area of the institution

- The description of the objectives and value added or improvement pursued in applying the practice to management or to attending to the needs of stakeholders
- Prior planning on the method of application of the practice and the target results and the method for monitoring the practice

*Implementation of the practice* This criterion is used to assess the description of the activities carried out, their timing and the resources used. To that end, the following aspects are taken into account:

- The structured description of the implementation of the practice: actions, timing and resources applied
- The degree of adaptation in the deployment to the approach of the practice (objectives, areas, overseers of the planned activities, the monitoring method)

*Results of the practice* This criterion is used to assess the description of the results obtained, relating them to the objectives established and changes introduced during the deployment of the practice. An assessment is also made with regard to the contribution of the qualitative and quantitative data to the fulfilment of the objectives. To that end, the following aspects are taken into account:

- The description of the qualitative and quantitative results obtained following the application of the practice and its comparison with the initial situation
- The degree of alignment between the measurements of the described results and the planned monitoring method
- The level of achievement of objectives and the added value described in the approach
- The provision of data or fundamentals on the sustainability of the practice

*Evaluation and review* This criterion is used to assess the description of the evaluation and the review process carried out and the proposals for improvement identified and implemented in the practice, as well as the scope of the learning related to the results obtained and those not obtained. To that end, the following aspects are taken into account:

- The description of the evaluation and review process conducted after implementation of the practice. In other words, what the institution does to evaluate and review the approach and deployment of the practice
- The learning acquired in improving or perfecting the practice, the degree to which improvement action undertaken has been implemented and the description of the actions identified to achieve improvement and the planning of its implementation

*Innovativeness and replicability* This criterion is used to assess the description of aspects of internal innovation (at the institutional level) and innovation with respect to the context (at the university system level) considered to be part of the practice; it is also used to assess the elements and aspects that are transferable to another, distinct context and the possible recommendations that should be

considered for benchmarking activity. To that end, the following aspects are taken into account:

- The substantiated description of the aspects of internal innovation at the institutional level
- The substantiated description of the innovation that the practice can bring in the context of the university system
- The documentation provided for the replicability of the practice and for benchmarking activities at other institutions, external communication of the practice, methodologies and context elements for possible adaptation at other universities

It is important for the evaluation committee to have an assessment tool that weighs or assigns a specific evaluation value to each criterion, based on the preference for prioritizing one or the other at a given time—concrete experiences of evaluation committees suggest this. The key here is for the weighting to be built and divulged ex ante in a shared, sensible and substantiated way. As an example, a proposed model of a weighting table that may be used by an evaluation committee is shown in Table 4.1.

The score for each criterion was based on a scale of 0–50, taking into account the evidence to substantiate the description of the practice, which is summarized in Table 4.2.

Table 4.1 Evaluation   committee weighting table   model	Criteria	Weighting (%)	
	Approach of the practice	15	
	Implementation of the practice	20	
	Results of the practice	25	
	Evaluation and review	20	
	Innovativeness and replicability	20	
		·	

Table 4.2	Description	of the	best p	ractice	evidence	scores
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Score from 0 to 50 for each criterion	Overall score for the practice
<i>Under 20</i> =no evidence or little relevance	Under 20=non-pertinent practice
<i>Under 30</i> =evidence is limited or not sufficiently complete; or some relevant but incomplete evidence is presented regarding all criteria and the aspects to be evaluated	Under 30= <i>nonrelevant practice</i>
30-40 = clear and relevant evidence, based on accurate data	30–40=adequate practice or best practice
<i>Over 40</i> = complete evidence given the level of relevance; accurate data and interrelatedness with all criteria and aspects for evaluation	Over 40= <i>excellent practice</i>

# 4.4 Benefits Provided by the Identification, Evaluation and Assessment of Best Practice in University Management

In relation to the added value that can be offered to institutions promoting a BP, recognition of the applicants and their experience in the field nationally and internationally should be considered. It has already been mentioned that the natural concern of an HEI to achieve excellence leads it to find referents in organizations that have achieved success in some of their systems and management and to the identification of best practice that can be replicated and implemented as part of a strategy that might support the generation of significant leaps in quality via a short but highly efficient route.

It is also possible to suggest other possible benefits for the HEI that applies BP, such as national and international institutional prestige and recognition for leadership and management practices, enrichment of the BP presented supported by the feedback from external evaluators and provision of qualified information that allows comparability between internal management systems to be assessed. Furthermore, other benefits might be acknowledged: the use of the BP as a source for the incorporation of new approaches, methodologies and tools for institutional management, the generation of discussions at the university about strategic management, the qualifications of the human resources at the university, and the motivation of the different units of the institution to identify or accelerate processes associated with best practice.

Additionally, it might also be suggested that the identification of BP may help to support the generation of positive impacts on the national systems of higher education, including the following:

- Improved visibility of knowledge and models of improvement for the practice of strategic university management, with the consequent enhancement of systems of management and strategic planning
- The availability of a network of peer institutions and the establishment of a teaching community specializing in the subject, with interactions and frequent exchanges on best practice in the sector, leading to the creation of shared knowledge
- Internationalization and benchmarking across higher education systems, currently characterized by barriers and roadblocks such as the public/private division and the lack of open public policies
- Building spaces for participation and discussion among diverse higher education institutions interested in being qualified for their strategic management
- The creation of opportunities for interlinking the different and diverse institutions of higher education

### 4.5 Final Discussion

The HEIs' natural concern for excellence cannot be assumed to be an internal institutional bias, even less when it is concerned with the universities' strategic management. Therefore, it is possible to observe in the HEIs a continuing search for organizational reference points that have attained significant levels of development and success, both internally and externally to the educational sector.

Among the many and varied methodologies for the identification and emulation of excellent institutional management systems, the identification, assessment and accreditation of best practice are very interesting strategies that might allow HEIs, at the individual level, to produce significant jumps in quality in a short timescale and a highly efficient way, and at the same time, it may allow the efficiency of higher education systems to be improved at regional and national levels. The HEI applicants for the BP would benefit from a strengthening of institutional, national and international recognition and from an enrichment of their practices based on assessment.

Accordingly, the proposed conceptual framework described in this chapter draws on the EFQM Excellence Model for the identification, assessment and accreditation of BP in university strategic management. This is because it may be one of the tools which best contributes to this process, bearing in mind that it is a practical and not prescriptive process, which enables organizations to assess where they are on their way to excellence and helps them to identify their key strengths and potential gaps and to have in place a basic structure for organizing their management system.

The integration and adaptation of the EFQM Excellence Model, with its agents (enablers and results) and the RADAR logical schema of the conceptual framework for the identification of best practice in university management, have been the main contribution of this text. The innovative aspect highlights the adaptation of the specific elements and concepts of the model to the realities of the HEIs, especially concerning their management and organizational elements. Additionally, other relevant aspects include the guidelines provided to support the identification of the HEIs takeholders and HEIs' unique processes and therefore their specific results and the idiosyncrasies of university management services.

The proposed conceptual framework has relevant practical implications since it provides academic managers at different organizational levels (top and middle managers, service managers) with a structured approach to the self-assessment of diverse practices in the field of strategic management, which they might find useful in the assessment and improvement of the performance of their institutional management practices on the journey towards continuing excellence.

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