



Developing and **Actioning**

Strategic Planning in Higher
Education Institutions

By Assoc. Prof. Teay Shawyun, Ph.D.

Your Development
Folder

DEVELOPING AND ACTIONING STRATEGIC PLANNING IN HIGHER EDUCATION INSTITUTIONS

Teay Shawyun

**Center for Excellence, Assumption University of Thailand
Kingdom of Thailand**

Assumption University Press

592/3 Ramkhamhaeng 24 Rd., Hua Mak, Bangk Kapi, Bangkok 10240, Thailand

ISBN: 978-974-615-051-4

© **Teay Shawyun**

This book is copyrighted by Teay Shawyun. The contexts and contents of the book can be used for further research and academic purposes or in teaching without seeking the permission of the authors. The contexts and contents can be used as long as the contexts and contents are referenced to Teay Shawyun (2010).

Dedications and Acknowledgements

*This book is dedicated to my students
who have challenged me to learn
how to teach and to share what I have learned;
they have taught me never to stop
learning and sharing what I have learned.*

*This book is also dedicated to my family
who have borne both the thick and thin of life's dramas with me;
without their unquestioned love,
this book would not have been completed.*

*This book could also not have been accomplished
without the help of my friends who have shared their time,
their thoughts and their efforts with us in ways,
both large and small. Though many had contributed,
we would like to acknowledge the help of*

Prof. Nirwan Idrus (Malaysia)

and

Dr. Vimolwan Yukongdi (Australia)

who shed lights on improvement through their comments

and

Prof. Shirley Briggs (UK)

*who laboriously and meticulously go through
the proof reading of the transcripts.*

*Without their invaluable comments and help
that have been rendered to us in the course of completing this book,
this book would not have been realized.*

To ALL, the readers, a big thank you

Preface

This book aims to bridge the gap between preaching and practice in Strategic Planning in Higher Education Institutions (HEIs). As academics, we have been preachers of management theories and concepts but, when it comes to the real world of practicing what we profess to know well, it is surprising that preaching and practice often diverge. Management principles are simple and straightforward to teach but when these principles are put into administrative or management practices in HEI, we do not fare that well in comparison to remaining within the safe zone of teaching.

This is normally the case facing most Higher Education Institutions (HEIs) as they move forward on quality drives which are both turbulent and never-ending journeys of continuous improvement. These journeys can be managed, however, if they are planned and, if planned, they can be better measured based on the mission and goals of the position that it is the institution's intention to achieve and sustain. This is basically management through measurement. In this management, it is necessary first to plan the desired outcomes; these then become the measures of achievement in terms of fulfilling the envisioned dreams. This is strategic management applied to managing Higher Education Institutions.

As my mentor, Bro. Martin Komolmas who has transformed Assumption University over the last 4 decades through his dreams and vision in providing a strong foundation of education for the formation of the “total graduate as a total man with a destiny”, this book has also been written with a dream in mind: how strategically to manage a Higher Education Institution. This book has therefore been written with the aims of: 1) developing a framework for the strategic management of HEIs by adapting the fundamentals of business strategic management and planning, and 2) developing a simpler framework for the analysis, formulation and implementation of strategies based on the “capabilities and position” perspectives used throughout this book. Bro. Bancha Saenghiran, my second mentor has always guided me in the strategic implementation of a strategic plan of which he has a strong influence.

Thus, it is hoped that this book will be useful to education industry practitioners in developing strategic plans that can be implemented successfully. It is also hoped that the perspectives used here will help such practitioners address issues regarding strategic capital assets (i.e. the human, information and organizational assets), of HEIs.

This book would not have been realized without the dreams of those who dare to dream and to whom this book is dedicated. I have learned a great deal from the Au family and from our Asian counterparts whom we thank for the inspiration of this work. There are many others we would also like to thank: my friends and colleagues, the stakeholders, but most of all, my family and my beloved students. This book is also dedicated to everyone who strives always to learn and who dares to dream, especially our dearest students who challenged us to learn from them in order to teach better.

As a final note, in writing this book, there are still opportunities for improvement as I am still continuing to learn, improve and innovate. Thus, last but not least, I would like to learn from your input and hope that you find this book of great use in the management of your HEI or your school or even yourself. We thank everyone who has contributed in one way or another, by exploring, learning and growing together, to make this book a success and a reality.

Teay Shawyun

January, 2012

Table of Contents

	Page
Chapter 1 Strategic Management in a Higher Education Institution	1
1.1 Strategic Quality Management in Higher Education Institutions	1
1.2 Imperatives in Managing HEIs Strategically	3
1.3 Introduction to Strategic Management in a Higher Education Institution	5
1.4 An Integrated Model of Strategic Management for HEI	8
1.4.1 Managing the Marketplace Strategy	9
1.4.2 Managing Organizational Capabilities	9
1.5 “Capabilities” and “Position” Perspectives of Strategic Management	10
Chapter 2 Strategic Management of a Higher Education Institution	19
2.1 Introduction	19
2.2 Basic Planning Definitions	21
2.3 Developing the Basic Strategic Plan	26
2.3.1 Writing the Vision Statement	26
2.3.2 Writing the Mission Statement	26
2.3.3 Writing the Values’ Statement	27
2.3.4 Conducting an External Environment Analysis (OT)	27
2.3.5 Conducting an Internal Environment Analysis (SW)	27
2.3.6 Identifying the Strategic Issues	28
2.4 Guidelines in Developing the HEI’s or School’s Strategic Plan	29
2.4.1 Strategic Analysis	30
2.4.2 Strategic Formulation	34
2.4.3 Strategic Implementation	35
Chapter 3 Internal Environment Analysis and Assessment	39
3.1 Internal Environment Analysis	40
3.2 Strategic Capacity and Capability Framework of the HE Institutions	41
3.2.1 Strategic Capitals in Higher Education Institutions	43
3.2.2 Analytical Framework of the Strategic Capacity and Capability of HE Institutions	44
3.2.3 Literature on Capability and Capacity Building Tools and Methodologies	45
3.2.4 Operationalization of Capability and Capacity Capital Sustainability	46
3.3 Capability and Capacity Assessment Tool (CCAT)	56
3.3.1 Procedures of the Capability and Capacity Assessment	57
3.4 Value Chain Analytical Framework of a HEI or School	61
3.5 Financial Analysis	64
3.6 Summary of Internal Environment Factors Analysis (SIEFA)	66
Appendix 3.1	73
Chapter 4 External Environment Analysis and Assessment	87
4.1 External Environment Analysis	87
4.2 Societal Environment Analytical Framework	90
4.3 BPEST Analysis	91
4.4 Stakeholders’ Analysis	92
4.5 Education Industry Analysis	94
4.6 Customer Profile Analysis	99
4.7 Competing Education Products: Providers’ Analytical Framework	101
4.8 Summary of External Environment Factors’ Analysis (SEEFA)	104
4.9 Strategic Environment Factors: Analysis Summary (SEFAS)	105

Chapter 5 Strategic Formulation for the HEI or School	110
5.1 Strategic Formulation	110
5.2 Corporate and Business Strategies	114
5.3 What is a Corporate- or Organizational-level Strategy?	115
5.4 Five Competitive Strategies	116
5.5 Integration Strategies	120
5.6 Intensive Strategies	121
5.7 Diversification Strategies	123
5.8 Defensive Strategies	123
5.9 Joint Venture and Combination Strategies	124
5.10 Mergers	124
5.11 Mergers, Acquisitions and Takeovers: What Are the Differences?	125
5.12 Strategic Alternatives: Formulation, Evaluation and Recommendations (SAFER) Framework	126
Chapter 6 Actioning the Strategic Plan through Strategic Mapping	133
6.1 Introduction	133
6.2 Actioning the Strategic Plan	135
6.2.1 Conventional Approach to Strategic Implementation	135
6.2.2 Balanced Scorecard Approach to Strategic Implementation	138
6.2.3 Strategic Mapping of the Initiatives of the HEI or School	145
6.2.4 Strategic Mapping of the Strategic Themes	146
Chapter 7 From Strategic Mapping to Developing Operational Action Plans	156
7.1 Strategic Implementation	156
7.2 What Needs to be Done by the Schools, Departments and Programs?	157
7.3 From Strategic Mapping to Developing Operational Action Plans	159
7.3.1 Guidelines in Developing the OYPB (One-Year-Plan and Budget)	159
7.4 Alignment of Strategic HEI Plan in Schools and Action Planning	161
7.4.1 Worked Example of the Mission of a HEI	161
7.4.2 Worked Example of Strategic Goals for Theme 2 on Creating and Strengthening Quality Teaching and Learning for a HEI (P1 - Phase 1 and P2 - Phase 2)	163
7.4.3 Worked Example of the Mission of a School or HEI -SOA	164
7.4.4 Worked Example of Strategic Thematic Strand 1 for a HEI - SOA	164
7.4.5 Worked Example of Goals and Objectives for a HEI for Teaching and Learning	165
7.4.6 Development of the Action Plans for Strategic Thematic Strand 1 of HEI - SOA based on the HEI's Key Strategic Goals	165

Chapter 1

Strategic Management in a Higher Education Institution

Objectives of the Chapter

- To understand the need for Strategic Quality Management in Higher Education Institutions (HEIs).
- To understand the necessity for managing the HEI strategically.
- To understand the Strategic Management of a HEI.
- To introduce an integrated model of Strategic Management for a HEI.
- To introduce the “Capabilities” and “Position” perspectives of Strategic Management.

1.1 Strategic Quality Management in Higher Education Institutions

“QUALITY” is ever an elusive and evolving, omnipotent and ubiquitous business mechanism. It has been used and manipulated by organizations to convince consumers that their products and/or services have achieved a level of acceptance based on certain standards and criteria. Even the education industry has not escaped from this syndrome and all HEIs (Higher Education Institutions) are bent on having their educational products and services achieve a certain acceptable level of standards and criteria that finally leads to its being accredited or certified as “fit for purpose”. The key question is: “What is quality in education?” Experts and exponents have searched and researched high and low for a definitive definition that constitutes “quality education”.

Vroeijenstijn (1991) asserted that “it is a waste of time to define quality” as it is a relative concept, but does this mean that we do not action on quality? Rather than trying to define “quality education”, one can perhaps start with the HEI’s purpose or mission which represents the strategic direction of the reason for the HEI’s existence. The HEI’s purpose underpins national and social development through the nation’s skilled manpower, which is created and developed through three sets of key activities and actions. These are:

- Producing competent and qualified graduates to meet the needs of organizations in all sectors, and producing principled and productive citizens who can bring about positive and proactive changes through innovative and creative essentials;
- Pushing forward the frontiers of knowledge via research through the desire to find new knowledge;
- Contributing to the development of society through community and academic services for the betterment of that society and its communities in the future.

HEIs have a responsibility to society to develop the future human capital through the educational value that is proposed to the stakeholders (i.e. students, alumni, employment markets, etc.). Conti (2005 and 2006) emphasized the need to understand quality

management from a systems perspective by extending the quality management concepts of economic transactions to social relations by creating value for stakeholders. This quality perception becomes “judgments of values” that are intrinsically associated with the relationships between mankind and his environment that consist of exchanges of values.

This is a summation of product quality, service quality, image and/or relationships divided by the cost to buyers (Gale, 1994). The main issue is the alignment of the internal processes of the institution and the schools through strategic management and the measurement of achievements through quality management of these key processes to create the educational value proposed to stakeholders (Kaplan and Norton, 2001 and 2004). The key is to manage strategically those components of quality, information and planning which underpin education excellence in order to align integrated learning and the growth of human, information and organizational capital, thus utilizing internal processes to create value. This integrating and linking mechanism uses a triangularization of the three main core systems of quality management, information management and planning management (Teay, 2008) as these cover most aspects of the creation and delivery of educational value in the HEI.

Successful strategic quality management in a HEI (Collins and Montgomery, 1995) requires an understanding of the context of the HEI’s mission which represents its “reason for existence” or its very purpose. What the HEI does or sells must be “fit for purpose” (Teay, 2007). This inevitably means that quality in education is implicitly and explicitly about:

- The outputs and outcomes of education must be of use or fit for some purpose,
- The stakeholders, in terms of both “the providers” and “the users” of education,
- The moves towards achieving improvements or innovations in education,
- The actions and activities in education in terms of accomplishing something effectively and efficiently.

Holistically, since the late 1980s and into the 1990s, Quality in Higher Education and key literature concerning this topic (ENQA – European Association for Quality Assurance in Higher Education, 2005; Greene, 1994; Teay, 2005, 2006 and 2007) has iterated and reiterated that Quality in Higher Education has been, is and will always be about and actioned through:

- A traditional quality definition of **benchmarking** to the best which might not be within the same context or content. As such, benchmarking to the best in an appropriate way is based on internal and external contexts.
- **Conformance to Specifications or Standards** which is static in nature as the criteria used to set such standards are unclear; it is not always the case in higher education that these are easily measurable and quantifiable. Under such a situation, Conformance and Compliance to Specifications or Standards normally uses proxy measures and assessment methodologies to measure the subjective quality of educational performance qualitatively

and quantitatively.

- ***Fit for Purpose***: this emphasizes specifications based on the “mission or reason for the existence” of the HEI that are developmental; this recognizes that the purpose might change over time thus requiring the appropriateness of the specifications to be re-evaluated.
- Quality as the effectiveness in **achieving an institution’s mission and goals**.
- Quality as **meeting customers’ stated or implied needs**.

A key counter argument is that benchmarking and the conformance to specifications can allude to a “follower” mentality rather than pave the way for innovation or creativity, which is what performance is about. While acknowledging the traditional and accepted use of benchmarking and conformance, this book looks beyond these and aims at advancing “thinking outside of the paradigm” leading into new zones of innovation that will benefit mankind.

To meet the basic principles of a HEI and its strategic quality requirements, as noted above, key educational standards and criteria worldwide must effectively address the quality of the institution or program both within and beyond. Strategically, the centerpiece is the students so a strategic plan should address the needs and requirements of the new generations of students, clearly defined and specified in the following areas:

- Success with respect to meeting the “new age” needs and requirements of students, together with students’ achievements in relation to the institution’s re-positioned mission, including considerations of course completion, State-licensed examinations, and job placement rates.
- Curricula.
- Faculty.
- Facilities, equipment and supplies.
- Fiscal and administrative capacities as appropriate to the specified scale of operations.
- Student support services.
- Recruiting and admissions’ practices, academic calendars, catalogues, publications, grading and advertising.
- Measures of program length and the objectives of the degrees or credentials offered.
- Records of students’ complaints received by, or available to, the agency.
- Records of compliance with the institution’s program responsibilities, the results of financial or compliance audits, program reviews, and any other information pertaining to quality assurance.

1.2 Imperatives of Managing a HEI Strategically

A HEI, like any other organization, has specific processes that support the achievement of its teaching-learning-research missions and that contribute to the academic and social development of the community and stakeholders at large. The three key processes (Ashworth, 1999; Childe *et al.*, 1994; CIM-OSA Committee, 1989) are: the operational processes that

create, produce and deliver educational value; the support processes that support the operational processes (Garvin, 1998; Porter, 1980); and those management processes that encompass goal setting, controlling and organizational behavior processes.

This underlies the imperative that quality in the HEI must move from a monitoring stance to management that is focused on strategy (Cullen *et al.*, 2003) which supports management through measurement (Bourne *et al.*, 2005). This highlights the fact that the internal contextual factors, which are interactive in nature, are much more complex than the existing simplistic physical and formal systems affecting performance. The performance model of Martz (2001) for a university setting put forward the following principles: to define performance expectations, create attainable but challenging goals, furnish clear measurements, encourage involvement, and provide process clarity and feedback.

Since the 1990s, education has been viewed from a management perspective which is appropriate in the sense that “education must offer value to the end consumers”, and “education must have a purpose”. Inescapably, education, as looked at through the management lens, is built on the management principles of POC3 (Planning, Organizing, Communicating, Coordinating and Controlling), the Quality lens of PDCA (Plan, Do, Check and Act), the Performance lens of ADLI (Approach, Deployment, Learning and Integration) and the Results lens of LeTCI (Level, Trend, Comparison and Integration) of performance results. As such, in meeting the stakeholders’ needs and requirements in its creation and delivery of value, education must be strategically managed based on the institution’s purpose or mission”.

The rationale of this book supports Andersen *et al.*’s (2006) holistic approach of harnessing the various tools and concepts into an overall framework where their inter-linkages are understood when responding to both internal and external challenges. While most of the framework looks at the macro or “big picture”, Rouse and Putterill (2003) proposed a macro-micro linkage of: 1) the interface between the organization and stakeholders; 2) the capacity and capability of resources; 3) planning – evaluation and resource – achievement; and 4) the basic core elements of input – processes – output. This approach of moving from the big picture at an organizational level (the strategic plan) to an operational level (action plans) is the key determinant of success supporting Franco-Santos *et al.*, (2007), Bernardin *et al.*, (1998); Kennerly and Neely (2002); Harrington (2005); Newkirk-Moore and Bracker (1998); Temporal (1990); Bolt (1993); Burach *et al.*, (1997); Tovey (1991); and Mason (1993) which reinforced the imperatives of managing the implementation from the strategic to the operational levels.

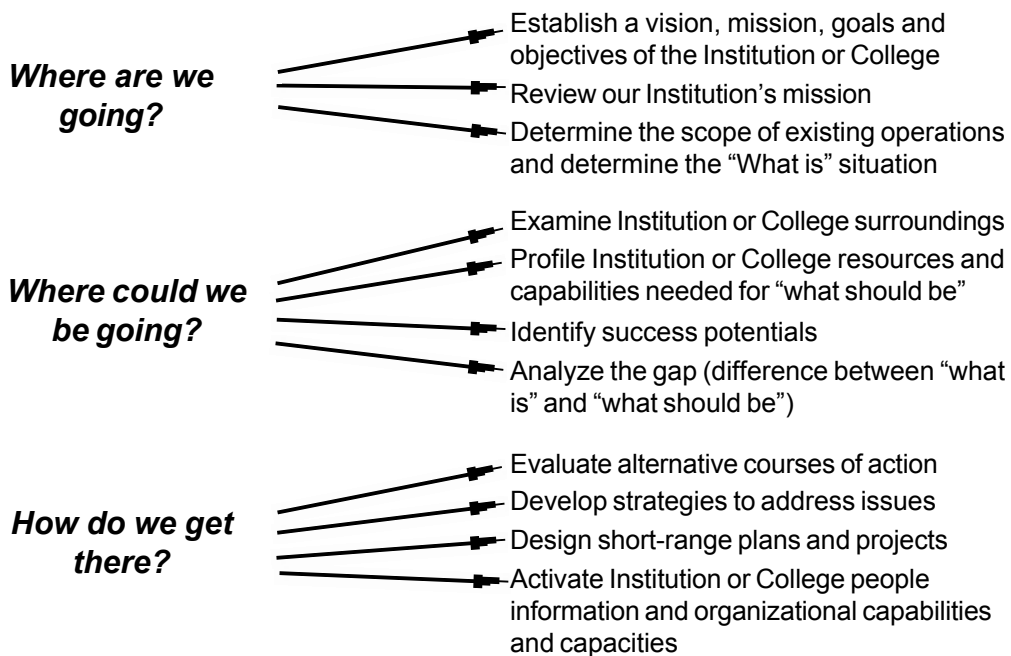
An important focus of this rationale is its internalized approach in identifying the key systems and mechanisms in the organization based on the “capacities and capabilities” approach. The rationale is that, in order for an organization to perform and excel, it must flush out unnecessary waste and unprincipled practices concerning influences that can impede the progress of developments which will benefit internal and external stakeholders rather than those of specific

interest groups. As such, managing the internal sets of capabilities and capacities consciously and conscientiously is the key building block that must be recognized and developed in bettering educational values through the value analysis it offers for a better and more ethical society. This is ultimately the mission of any HEI and is one which should not and cannot be compromised.

1.3 Introduction to Strategic Management in Higher Education Institution

The Balanced Scorecard approach (Kaplan and Norton, 2004) means that, in education, management must pervade all levels of the HEI to ensure that the human, information and organizational systems that form the basis of the capabilities and capacities of the institution must be competent in utilizing the internal education processes needed to create and deliver educational value (Teay, 2007). This educational value, when ‘consumed’ by the stakeholders, will strengthen the financial base of the institution.

Figure 1.1: Pragmatic Questions of Strategic Management

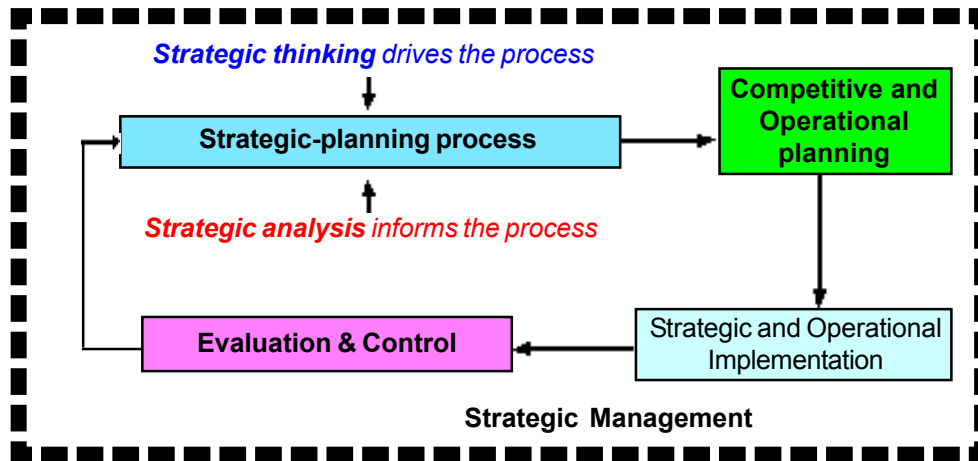


Source: Adapted from Teay Shawyun, (2007): A Primer on Strategic Organization Analysis and Planning Model, Assumption University Digital Press, Bangkok, 2007.

A key question that all strategic education managers must address is: "what is strategic management and what is strategic planning?" within the education context. In the theoretical approaches to Strategic Management, there are terminologies of Strategic Thinking, Strategic Planning and Strategic Management being used. With these diverse terminologies, a key question is which comes first or how they are related or whether they are talking about the same thing but using different terminologies.

In Lawrence's discussion paper (Lawrence, 1999), the many views of strategic thinking covers those of: Wilson (1994) is "thinking about strategy"; Mintzberg (1994) as "particular way of thinking that is a synthesizing process of utilizing intuition and creativity whose outcome is an integrated perspective of the enterprise" whereas "strategic planning is the systematic programming of pre-identified strategies from which an action plan is developed"; Prahalad and Hamel (1989) as "crafting strategic architecture that emphasizes creativity, exploration and understanding discontinuities"; Stacy (1992) as "using analogies and qualitative similarities to develop creative ideas... (and) designing actions on the basis of learning"; Raimond (1996) as "strategy as creative imaginations" and strategy planning as "strategy as intelligent machine that is driven by data and information processing). In general, strategic thinking is creativity and imagination driven that works within a certain set of assumption that leads to the development of a set of courses of alternatives and the selection of alternative courses of actions in strategic planning. Good strategic thinking should uncover potential for creation of value. It is a way of understanding the drivers of the business that challenges the conventional thinking of an organization.

Figure 1.2: Relationship of Strategic Thinking, Planning and Management



As shown in Fig. 1.2, the strategic thinking drives the process, and strategic analysis informs on the process of the strategic planning. These processes that lead to the development of strategies and the implementation of these strategies are constituted as the strategic management of the organization. As such, strategic management entails the strategic thinking, the strategic analysis that identifies the organization's SWOT and issues and the strategic planning processes in the strategies formulation, evaluation and selection of an appropriate set of strategies to be implemented.

In addressing the strategic management of a HEI (Higher Education Institution), there are three basic questions that the institution should identify strategically (Figure 1.1) and where answers should be targeted. These are:

- i. **Where we are now and where are we going?** – This should address the institution's current and past performance based on an analysis of both the internal and external environments in order to understand the current position of the HEI in the education industry based on its capabilities. This evaluation of current performance, based on the analysis, will determine whether the previously set vision, mission, goals and objectives (Collins and Porras, 1991 and 1996) have been achieved; it also determines where the institution will be going based on its current resources and capabilities.
- ii. **Where do we want to go or where could we be going?** – This question should address where the institution wants to stake out a future position in the education industry and with what product or service offerings and stakeholder groups the institution intends to compete. This will be based on the internal and external analysis to determine what is deficient or what is needed to achieve that future position. The main issues to be addressed here are:
 - Market positions of the educational product and service offerings must be staked out.
 - What are the educational and service needs of buyers and which groups are to be served?
 - What educational outcomes are to be achieved through the educational product and service offerings?
- iii. **How do we get there?** – This should address the resources and capabilities that the institution needs to create or build to execute its selected strategies in order to achieve the staked-out position and the outcomes that it intends to achieve. It should also address the issue of what to do and how to do it in terms of the implementation of the selected strategies. This enters the realms of building a capable and competitive organization in the education industry through building the capabilities and capacities to achieve its mission and goals.

The three questions highlight two main aspects that should be dealt with strategically. In moving forward into the future, the HEI is aiming to define a position that it intends to stake out and achieve in the future. Kaufman, et. al (2003) identified the prioritization of the transformation of the organization to meet the needs of its clients and ultimately society. This calls for the addition of measurable value that flows from individual performances and accomplishment to organizational and societal contributions. This highlights the capability and capacity of the organization and its individual to create and add value, in this case educational value to the students and societal contributions to the society and stakeholders at large. In its strategic intent, it must determine what position it can sustain where it can perform better relative to other education providers who offer the same or a similar set of product or service offerings by targeting a specific group of educational offerings in the consumer market. This is dependent on its ability to compete; its performance here will be based on its existing competency or on its ability to develop a new set of capabilities that the HEI can lever to perform better and achieve a greater share of the cream of the market. This

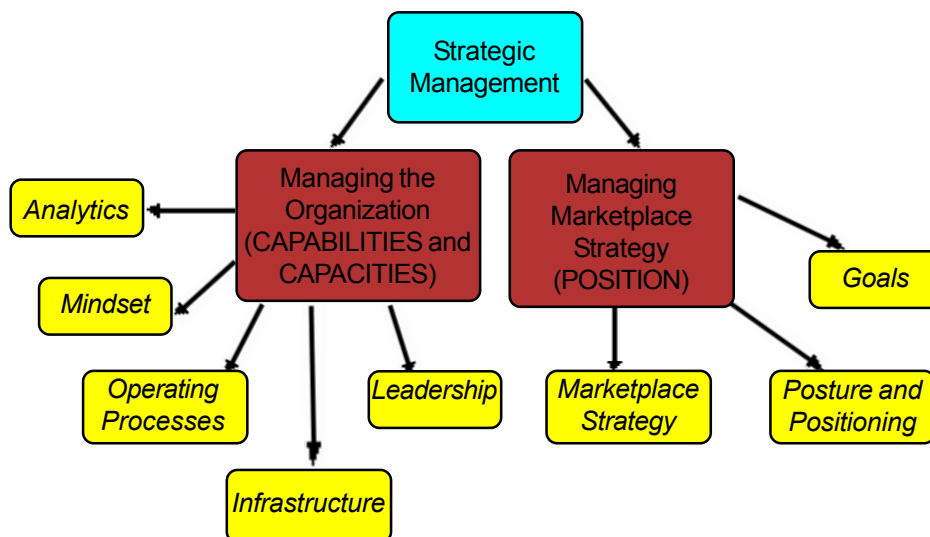
inevitably means that the institution needs to understand fully both its internal operating environment and its external market environment in order to implement successfully strategies which are “human based”. Successful implementations depend on the human capacities and capabilities of the HEI. As such, the HEI must invest in contributing to the development of its internal human capitals that develops the future human capitals of the society. This must be done in a conscientious way that does not place the importance of the financial gains over the development of the human capital for society.

In basic management terminology, the institution must conduct a “situation analysis” of the internal and external environments which have an impact on its present and future positions. Based on this analysis, it then must plan and formulate the strategies or actions it will perform in order to achieve its envisioned position in the future. Once the strategies are formulated, it must then action these through its implementation of the strategic plan.

1.4 An Integrated Model of Strategic Management for an HEI

In seeking to achieve an understanding of its external market environment, and to understand fully the institution’s internal operating environment, strategic management means that a HEI must manage both its existing organizational capabilities and capacities, as well as creating those that are required to achieve its marketplace strategy, thus leading to a position as a successful performer in the market place [Coyne and Subramaniam (1996); Gluck, Kaufmann and Walleck (1978); Dye (2006); Eisenhart and Sull (2001)].

Figure 1.3: An Integrated Model of Strategic Management for an HEI



Source: Adapted from Liam Fahey (1994): "Strategic Management: Today's most important business challenge" The Portable MBA, 1994.

As shown in Figure 1.3, strategic management in a higher education institution as an organization calls for:

1.4.1 **Managing the Marketplace Strategy:** This can be achieved by carrying out an appraisal of the institution's competitive position by:

- Reviewing the institution's mission, the competitive niche, and significant changes facing the education industry that have an impact on the institution's posture and positioning.
- Understanding where the institution has been (its past position), where it is now (its present position), and where it can go (its future position) in the competitive education arena.
- Comparing the institution's past performance with current market happenings and related environmental trends relative to its competitors in the education industry.
- Identifying where it can stake out a competitive position in the education industry whereby its strategic intent is to lever its capabilities in order to become a key or lead player.

The key questions that need to be asked are:

- What is the present situation of the institution in terms of its current competitive situation based on its existing vision, mission, goals and strategies relative to the performance of its competitors?
- How effective is the institution's competitive approach as indicated by its financial, market and operational key performance indicators?
- What forces are causing change in the education industry which therefore requires the institution to reshape its educational product and service offerings?
- What is the condition of the institution's resources and its potential leverage of its competencies to advance its present position?

1.4.2 **Managing Organizational Capabilities (Montresor, 2004):** An understanding of this is achieved through designing and developing the institution's strategies by:

- Analyzing competitive conditions in order to better understand the validity of the institution's current set of strategies and the set of capabilities and capacities that will be needed. These are defined in terms of leadership, infrastructure, mindsets, human resources, information, organizational knowledge and skills (capability) and the amount of all that is needed (capacity).
- Setting the institution's direction through the creation of objectives and goals that prepare the management and leaders to approach the future or to respond to the necessary market conditions.

- Evaluating the scope of operations in the light of developing competitive conditions as well as defining the consequences of maintaining or changing the institution's strategies regarding growth, stability and resources; the capabilities and capacities that are needed must also be addressed.
- Identifying the pace of the institution's directions in order to exploit competitive advantages or to improve competitive shortfalls. This must be done while maintaining a culture of trust, cooperation and team leadership throughout the enterprise and by linking strategic management to operational decision-making by establishing timeframes for operational accountability within the management team.

The key questions that need to be asked are:

- What is the desired market position of the institution in the education industry?
- Does the institution have a clear set of long-term goals that are complemented by medium- and short-term goals and objectives?
- Does the institution have certain deficiencies in its existing capabilities and capacities that need to be corrected or does the new envisioned position need a new set of capabilities and capacities in terms of human, information and organizational competencies that can be used to leverage its strategic intent in performance and that can be used to achieve its desired position?
- Does the institution have an understanding of the impact of market forces and competition on the institution's ability to develop the necessary capabilities and capacities to capitalize on opportunities in the educational industry in terms of its positional and strategic intent?

1.5 “Capabilities” and “Position” Perspectives of Strategic Management

McNamara of Authenticity Consulting (2011) stated that there is no one perfect planning model. What is selected by an organization is based on its purpose of strategic planning, whether it had done any planning before, the culture of the organization, the changing environment that the organization is facing and the success in planning of the organization. Based on this McNamara identified 6 different models of strategic planning that an organization can select to use when they embark on the journey of strategic planning as follows:

1. ***Model One - Vision based or Goal based strategic planning*** is normally done by a small organization that has not done any planning in the past to kick start the whole strategic planning process to ensure a well-rounded direction.
2. ***Model Two - Issues based planning*** which is done by organization with limited resources and want to achieve immediate buy-in.
3. ***Model Three - Alignment Model*** with the overall purpose of strong alignment of its missions and its resources to effectively operate the organization.
4. ***Model Four - Scenario planning*** which is normally used in conjunction with other

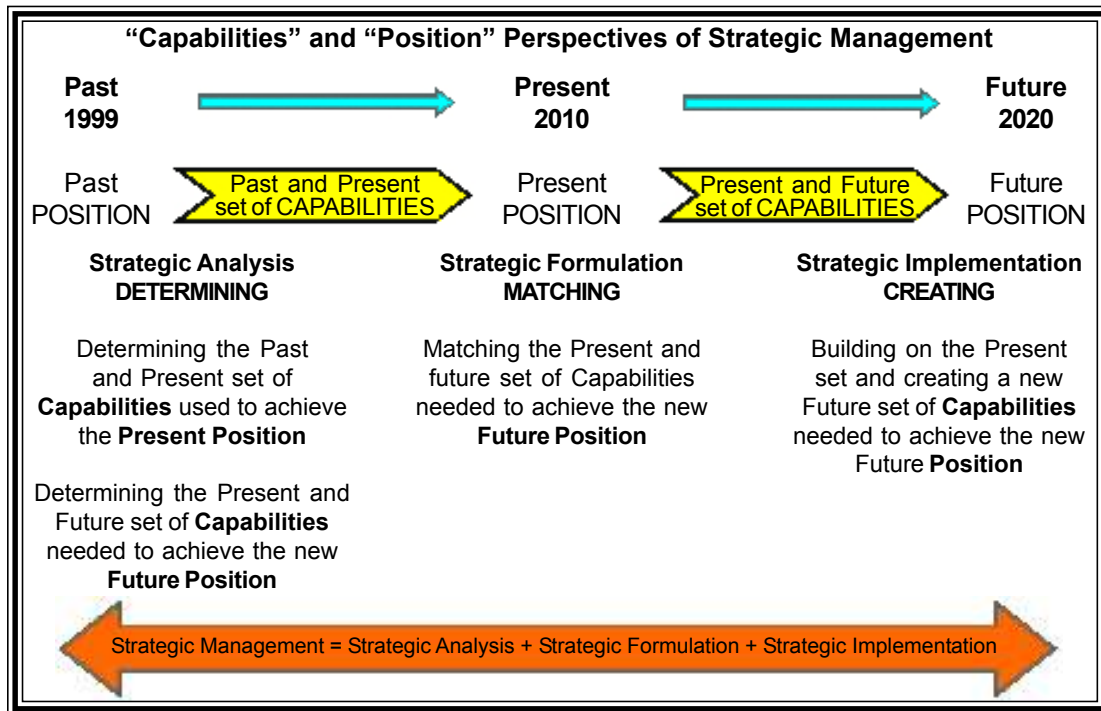
planning model to undertake strategic thinking and identify strategic issues and goals.

5. **Model Five - “Organic” or self-organizing planning** which is the traditional approach that looks at the general-to-specific or cause-effect mechanism of a broad assessment and analysis of the environment leading to a set of alternatives
6. **Model Six - Real time planning** assert that planning must be done continuously or “real time” as the circumstances and operating environment changes rapidly.

Even though there are various models or approaches as noted by McNamara, Strategic management is based on a few key fundamentals that have been generally established by most strategic management exponents (e.g. David (2005); Hitt, Ireland and Hoskisson (1999); Johnson and Scholes (2006); Mintzberg, Lampel, Quinn and Ghoshal, (2003); Teay (2007); Thompson and Strickland (2007); Wheelen and Hunger (2004)) in terms of a time dimension and the achievement of a staked-out position to be achieved through a set of capabilities. As noted above, the discussion on strategic management in a higher education institution revolves around certain key points of view as follows:

- **Past, Present and Future Point of View:** Strategic management works by analyzing what position an organization has reached and how it has achieved its present position. It also attempts to understand and to strive towards reaching an envisioned position where it intends to be in the future. As such, strategic management involves three time dimensions (the past, present and future) that it must analyze, interpret and understand before deciding on and plotting its future stance and staked-out position in the industry.
- **Capabilities and Position Point of View:** Strategic management works on the principle of competition amongst equals and unequals to achieve a staked-out “position” in the industry. It also works on the principle that the stronger equal will attain a higher share of the market through leveraging its set of capabilities and competencies. This means that the envisioned and staked-out position is achieved by way of a set of capabilities that the organization has developed and leveraged over time to achieve its present market position and its future envisioned position.

Figure 1.4: "Capabilities" and "Position" Perspectives of Strategic Management



As shown in Fig. 1.4, the institution's performance and achievement are denoted in three time dimensions of:

- **Past to Present Timeline of 1999 to 2010 (or the current year):** The imperative here is to determine what past and/or existing capabilities, in terms of key organizational resources (human, information and organizational resources), have been or are being used to create and add value to the institution's educational product and service offerings. The difference here is not in having the resources but in the degree of utilization of these resources to achieve the present position in 2010 (or the current year) from the past position in 1999.
- **Present Timeline of 2010 (or the current year):** As of 2010, the institution needs to determine its present performance and achievement based on key performance indicators (i.e. its financial, market and operational performance and achievements). This set of key performance indicators defines whether its existing vision, mission, goals and objectives have been achieved; variances in achievement and performance will be key determinants in its future positioning.
- **Future Timeline of 2010 (or the current year) to 2020:** As of 2010 (or the current year), once the institution knows its present standing in terms of its positioning, it will need to determine the future position that it intends to stake out in 2020. This calls for a review

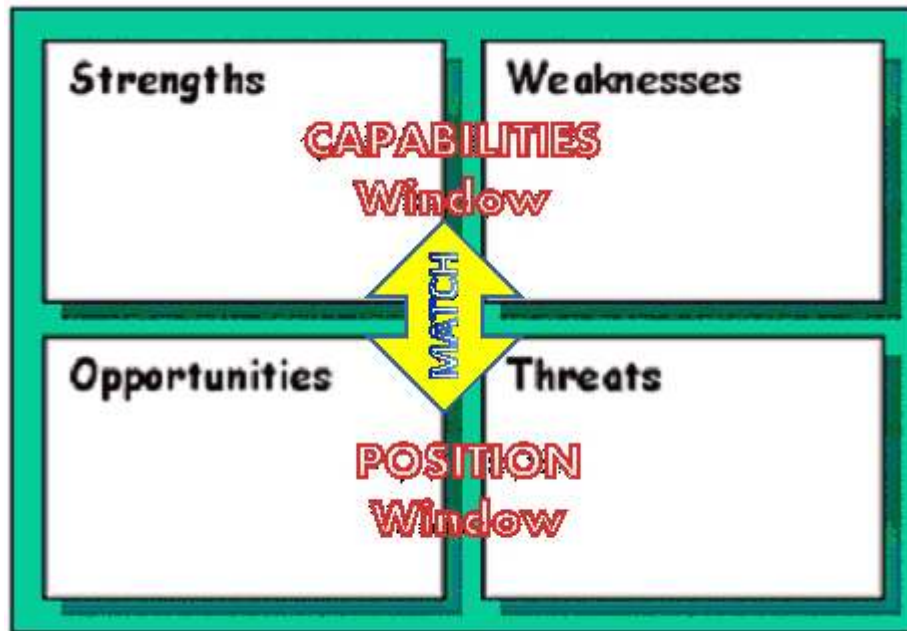
of its existing vision, mission and goals in order to produce a renewed or repositioned set of objectives based on an understanding of new trends and changes in the future environment. It also calls for the identification of a new set of capabilities to achieve this new position in 2010 (or the current year).

As also shown in Fig. 1.4, the “capabilities” and “position” dimensions of strategic management are:

- **Capabilities’ dimension:** It is a widely accepted notion that achieving certain aspirations or performance is based on a set of “capabilities” that underscore the knowledge, skills and values or the “competency set”; these bring about performance, as opposed to a “status quo” or “pure luck” situation. These aspirations represent an institution’s future envisioned position that it intends to stake out in the competitive educational arena. The degree of performance or achievement in this highly competitive area is contingent on the capabilities and capacities that the institution and its human talent have in terms of the utilization of their resources and the processes they have designed in order to create and deliver educational value. Inevitably, analyzing these capabilities amounts to an internal analysis of the institution, as the human, information and organizational resources and their utilization, constitute the internal part of the institution. This also means that analyzing the internal environment will lead to an identification of the “Strengths” and “Weaknesses” of the institution in terms of the degree of its competence in utilizing the resources rather than simply owning them.
- **Position dimension:** It is also a widely accepted notion that the instinct for human survival is geared towards making continuous improvements in a person’s present standing and aspiring to achieve a higher level of standing. The institution, which is an organizational entity, is no different from the human entity in striving to achieve higher and better ambitions from its present position. However, in its journey to reach these higher aspirations, an institution needs to understand its external environment as this will have an impact on its future in terms of the position it has staked out. A full understanding of these external environmental factors leads to an identification of the “Opportunities” and “Threats” that can affect its strategic intent.

As shown in Fig. 1.5, analyzing internal and external environmental factors will result in the traditional SWOT matrix where the “SW” represents the “Capabilities’ Dimension” of the institution and the “OT” represents its “Position Dimension”. In the formulation of the strategy, and as noted above, the performance and achievement of a certain envisioned future position is based on a set of capabilities which must be in place in order to achieve that position. This inevitably means that the envisioned position must be matched to the capabilities, as shown in Fig. 1.4, and in the implementation of the strategies, the capabilities’ dimension must be built in to achieve the position dimension.

Figure 1.5: SWOT "Capabilities" and "Position" Matrix



Summary

In summary, it can be said that strategic management is the “*determination, matching and creation of the capabilities of an institution to achieve a future envisioned position based on a timeline from the past to the present and into the future*”.

This means that strategic management, as expounded and depicted in Fig. 1.3, involves:

Strategic Management = Strategic Analysis + Strategic Formulation + Strategic Implementation

Strategic Analysis: *DETERMINING* the past and present set of **CAPABILITIES** that have been used to achieve the present position from the timeline 1999 to 2010 (or the current year) and to reach its present **POSITION** in 2010.

Strategic Formulation: *MATCHING* the present set and a future set of **CAPABILITIES** that are needed to achieve a future envisioned position from the timeline 2010 (or the current year) to 2020 to reach a new envisioned **POSITION** in 2020.

Strategic Implementation: *CREATING* the new set of **CAPABILITIES** that is needed to achieve its new envisioned **POSITION** in 2020 through the timeline 2010 (or the current year) to 2020.

Thus, in understanding and applying strategic management to a HEI, certain key principles, as expounded above and that are used as the framework in this book, include:

1. In strategic management, as shown in Fig. 1.4, the “capabilities” and “position” dimensions must be strategically analyzed, formulated and implemented on “time” dimensions of the past, present and into the future.
2. In strategic management, the two key determinants of performance are based on the matching of the “capabilities” and “position” dimensions. This inevitably means that an institution will not be able achieve a desired position without a set of capabilities and capacities that underlies its set of competencies. This strikes at the very heart of successful performance in terms of realizing the real strengths and weaknesses of the institution; these also ultimately form the set of competencies on which the envisioned position is achieved.
3. In strategic management, the successful achievement of an envisioned position does not involve merely having the necessary resources, but in an institution’s capability and capacity to utilize or lever its human, information and organizational assets. This inevitably means creating or building a set of capabilities and capacities, which is ultimately its competencies, in order to achieve its envisioned position. This is most probably the greatest problem for all institutions: failing to recognize its real competencies (i.e. its set of capabilities and capacities) that can be used to capitalize on opportunities and to mitigate against threats in order to achieve an envisioned position.

Reference

1. Andersen, B., Henriksen, B., and Aarseth, W. (2006), Holistic performance management: an integrated framework, *International Journal of Productivity and Performance Management*, Vol. 55, No. 1, pp. 61 - 78.
2. Ashworth, G. (1999), *Delivering Shareholder Value through Integrated Performance Management*, Financial Times, Prentice Hall, London, pp. 130.
3. Bernardin, H.J., Hagan, C.M., Kane, J.S. and Villanova, P. (1998), *Effective performance management: A focus on precision, customers and situational constraints*, Performance appraisal: State of the art in practice, Jossey-Bass Inc., San Francisco, CA, pp. 3 - 48.
4. Bolt, J. (1993), Achieving the CEO’s agenda; education for executives, *Management Review*, pp. 44 - 49.
5. Bourne, M., Kennerly, M. and Franco-Santos, M. (2005), Managing through measures: a study of impact on performance, *Journal of Manufacturing Technology*, Vol. 16, No. 4, pp. 373 - 395.
6. Burach, E. et al. (1997), The new management development paradigm, *Human Resource Planning*, Vol. 20, No. 1, pp. 14 - 21.
7. Chide, S.J., Maull, R.S. and Bennett, J. (1994), *Frameworks for understanding business*

- re-engineering, *International Journal of Operations and Production Management*, Vol. 14, No. 12, pp. 22 - 3.
8. CIM-OSA Standards Committee, (1989), *CIM-OSA Reference Architecture*, AMICE ESPRIT, Brussels.
 9. Collins, D. and Montgomery, C., (1995), *Corporate Strategy: A Conceptual Framework*, *Harvard Business Review*, April 1995 pp.
 10. Collins, J.C., and Porras, J.I. (1996), *Building your Company's Vision*, *Harvard Business Review*, September - October 1996 pp. 65 - 77.
 11. Collins, J.C., and Porras, J.I. (1991), *Organizational Visions and Visionary Organization*, *California Management Review*, Fall 1991, Vol. 34 Number 1 pp. 30 - 52.
 12. Conti, T. (2006), *Quality thinking and systems thinking*, *The TQM Magazine*, Vol., No. 3, (2006), pp. 297 - 308.
 13. Conti, T. (2005), *Quality and Value, convergence of quality management and systems thinking*, paper presented at 2005 ASQ World Conference on Quality and Improvement, Seattle, WA.
 14. Coyne, K.P. and Subramaniam, S. (1996), *Bringing Discipline to Strategy*, *The McKinsey Quarterly*, 1994 No. 4 pp. 61 - 70.
 15. Gluck, F.W., Kaufmann, F.P. and Walleck, A.S. (1978), *Thinking Strategically*, *The McKinsey Quarterly*, October 1978 pp. 9 - 20.
 16. Cullen, J., Joyce, J., Hassal, T. and Broadbent, M. (2003), *Quality in higher education: moving from monitoring to management*, *Quality Assurance in Education*, Vol. 11, No.1, pp. 5 - 14.
 17. David, F. R. (2005), *Strategic Management: Concepts and Cases*, Tenth Edition, Prentice Hall, Pearson, 2005, pp 14, 50 - 63 and 104.
 18. Dye, E. (2006), *Improving Strategic Planning: A McKinsey Survey*, *The McKinsey Quarterly* 2006 pp. 1 - 11.
 19. Eisenhart, K.M. and Sull, D.N. (2001), *Strategy as Simple Rules*, *Harvard Business Review*, January 2001 pp. 107 - 116.
 20. ENQA (European Association for Quality Assurance in Higher Education) (2005), *Standards and Guidelines for Quality Assurance in the European Higher Education Area*, European Association for Quality Assurance in Higher Education, Helsinki, Finland 2005.
 21. Fahey, L. and Randall, R. M. (1994), *The Portable MBA in Strategy*, John Wiley & Sons, 1994.
 22. Hamel, G., and Prahalad, C.K. (1989), *Strategy Intent*, *Harvard Business Review*, May - June, pp. 63 - 76
 23. Franco-Santos, M., Kennerly, M., Michelli, P., Martinez, V., Mason, S., Marr, B, Gray, D., and Neely, A. (2007), *Towards a definition of a business performance measurement system*, *International Journal of Operations and Production Management*, Vol. 27, No. 3, pp. 784 - 801.
 24. Gale, Bradley T. (1994), *Managing Customer Value: Creating Quality and Service that Customer Can See*, New York: The Free Press, Simon & Schuster, 1994, pp. 22.

25. Garvin, D.A. (1998), The Processes of Organization and Management, Sloan Management Review, Vol. 39, No. 4, pp. 33 - 50.
26. Greene, D. (1994), *What is Quality in Higher Education?*, Society into Research for Higher Education & Open University Press, Buckingham, 1994.
27. Harrington, H.J. (2005), The five pillars of organizational excellence, *Handbook of Business Strategy*, Emerald Group Publishing Ltd., pp. 107 - 114.
28. Hitt, M.A., Ireland, R.D. and Hoskisson (1999), *Strategic Management: Competitiveness and Globalization*, Third Edition, South Western, College Publishing, International Thompson, Cincinnati, Ohio, pp. 102 and 73.
29. Johnson, G. and Scholes, K. (2005), *Exploring Corporate Strategy*, Sixth Edition, Prentice Halls, 2006, pp. 24.
30. Kaplan, R.S. and Norton, D.P. (2001), *The Strategy focused organization: How the balanced scorecard companies thrive in the new business environment*, Harvard Business School Press, Boston, MA.
31. Kaplan, R.S. and Norton, D.P. (2004), *The Strategy Map; Converting intangible assets into tangible outcomes*, Harvard Business School Press, Boston, MA.
32. Kaufman, R., Oakley-Brown, H., Watkins, R. and Leigh, D., (2003), *Strategic Planning for Success: Aligning People, Performance and Payoffs*, John Wiley & Sons, Jossey-Bass/Pfeiffer, San Francisco, CA
33. Keenerly, M. and Neely, A. (2002), A framework of the factors affecting the evolution of performance measurement systems, *International Journal of Operations and Production Management*, Vol. 22, No. 11, pp. 1222 - 1245.
34. Lawrence, E. (1999), Strategic Thinking, discussion paper of Policy, Research and Communications Branch, Public Service Commission of Canada
35. Mason, A. (1993), *Management training in Medium sized UK Business organizations*, Harbridge Consulting Group, London.
36. Martz, B. (2001), Applying a standard performance model to a university setting, *Business Process Management*, Vol. 7, No.2, pp. 100 - 112.
37. McNamara, C., Basic Overview of Various Strategic Planning Models, adapted from Field Guide to Nonprofit Strategic Planning and Facilitation, downloaded on 26/11/2011 from <http://managementhelp.org/strategicplanning/models.htm>
38. Mintzberg, H., Lampel, J., Quinn, J.B. and Ghoshal, S. (2003), *The Strategy Process: Concepts, Contents and Cases*, Fourth Edition, 2003, Prentice Hall, pp. xiv.
39. Montresor, S. (2004), Resources, Capabilities and Theory of the Firm, *Journal of Economic Studies*, Vol. 31 No. 5 pp. 409 - 433.
40. Newkirk-Moore, S. and Bracker, J. (1998), Strategic Management training and commitment to planning: critical partners in stimulating firm performance, *International Journal of Training and Development*, Vol. 2, No. 2, pp. 82 - 90.
41. Porter, M.E. (1980), *Competitive Strategy*, Free Press, New York, NY.
42. Raimond, P. (1996), Two Styles of Foresight, *Long Range Planning*, April, pp. 208 - 214
43. Rouse P. and Putterill M. (2003), Predicting Performance. Special Issue: *Business Performance Measurement and Management* Volume 41, Number 8. pp. 806-816(11).

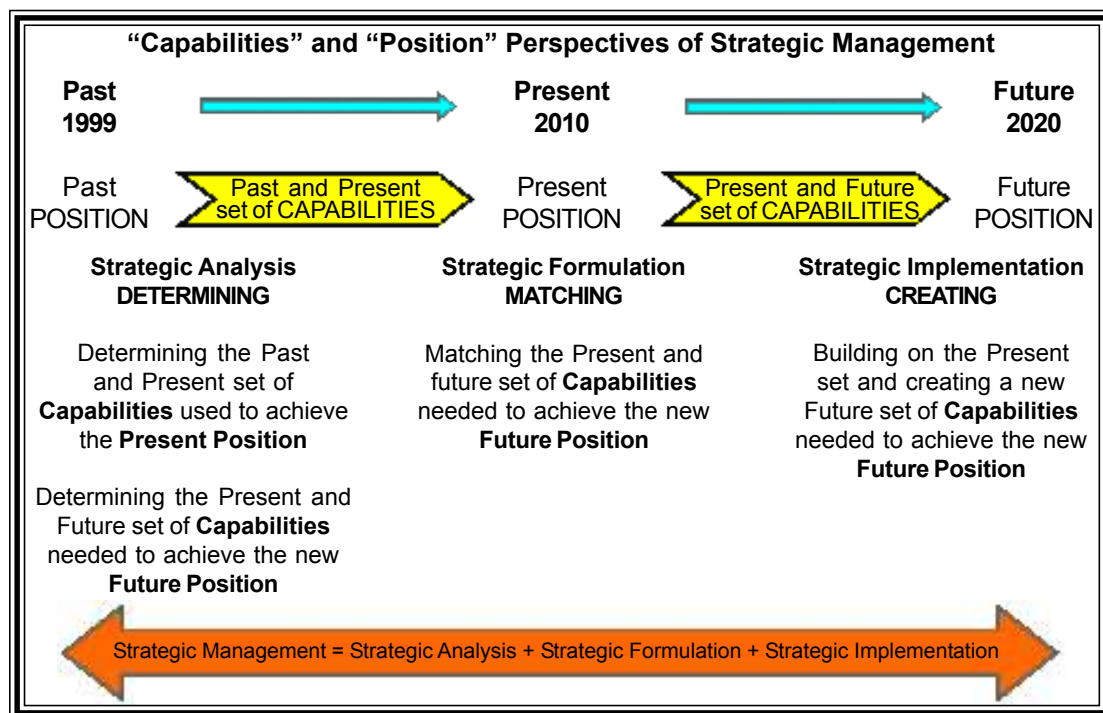
44. Stacy, R. (1992) *Managing the Unknowable*, Jossey-Bass, San Francisco
45. Teay, Shawyun (2005), *Quality Assurance and Strategic Implementation in Educational Institutions: A Holistic Alliance?*, *Journal of Institutional Research South East Asia (JIRSEA)*, Vol. 3 Number 1 (2005).
46. Teay, Shawyun (2005), *Higher Education Reform: A Strategic Multi-pronged Framework*, Proceedings in SEAAIR Conference in September 2005 at Bali, Indonesia. ISBN: 979-25-0220-3.
47. Teay, Shawyun (2006), *Integrated QMIPS (Quality Management, Information and Planning Systems)*, 1st Edition, 2006, Assumption University Digital Press, Bangkok, Thailand.
48. Teay, Shawyun (2006), *Integrated QMIPS (Quality Management, Information and Planning Systems)*, 2nd Edition, 2008, Assumption University Digital Press, Bangkok, Thailand.
49. Teay, Shawyun (2007), *An Integrated PMS Model for Strategic Management and Quality Assurance of an entrepreneurial educational institution in Thailand*, *The SEAAIR Book on Entrepreneurial University*, October 2007.
50. Teay, Shawyun (2007), *AuQS 2000 QMIPS QMS (Quality Management System)*, 5th Edition, December 2007, Assumption University Digital Press, Bangkok, Thailand.
51. Teay, Shawyun (2007), *A Primer on Strategic Organizational Analysis and Planning*, 4th Edition, 2007, Assumption University Digital Press, Bangkok, Thailand.
52. Teay, Shawyun (2008), *Strategic Triangularization of Quality-Information-Planning System for Higher Education Institute Performance Management*, 6th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2008, International Institute of Informatics and Systemics, Orlando, Florida, 29th June - 2nd July 2008.
53. Temporal, P. (1990), *Linking management development to the corporate future - the role of the professional*, *Journal of Management Development*, Vol. 9, No. 5.
54. Thompson, A. A., Jr., Strickland III, A.J. and Gamble. J.E. (2007) *Crafting and Executing Strategies - The Quest for Competitive Advantage: Concepts and Cases*, 15th Edition, 2007, McGraw-Hill Irwin. pp. 20 - 30 and 11.
55. Tovey, L. (1991), *Management Training and Development in Large UK Business Organizations*, Harbridge Consulting Group, London.
56. Vroeijenstijn, A. I. (1991), 'External Quality Assessment: servant of two masters?', paper presented at a conference on quality assurance in higher education in Hong Kong on 15-17 July 1991.
57. Wheelen, T. L. and Hunger. D. J. (2004), *Strategic Management and Business Policy*, 9th Edition, 2004, Pearson Prentice Hall, pp. 9, 10, 69 - 74 and 138.
58. Wilson, I. (1994), *Strategic Planning isn't Dead - It Changed*, Long Range Planning 27 (4).

Chapter 2

Strategic Management of a Higher Education Institution

Objectives of the Chapter

- To understand the “capabilities and position” perspectives in the strategic management of a HEI.
- To understand the basic strategic planning definitions.
- To understand the process involved in developing the Basic Strategic Plan.
- To provide a set of guidelines for developing a strategic plan for a HEI or school.



2.1 Introduction

Using the “capabilities and position perspectives of strategic management”, as shown in the main diagram above, it can be noted that the strategic management matrix has two main dimensions: three time dimensions and the “capabilities and position” dimension. These should be analyzed interdependently to determine the institution’s performance and achievement. The three time dimensions are:

- **Past to Present Timeline of 1999 to 2010 (or the current year):** The imperative here is to determine what position the HEI envisages for 2010 based on what it aimed to achieve over the 1999 to 2010 period (or the current year). This involves determining its past and existing capabilities in terms of its key human, information and organizational

resources and their utilization in order to create and/or add value to the educational products and services offered and used in achieving its present position in 2010. The main analytical objective here is, not to determine what resources the HEI has accumulated, but to ascertain the degree to which the HEI has utilized these resources in achieving its present position in 2010 from its past position in 1999.

- **Present Timeline of 2010 (or the current year):** The institution will need to determine its present performance and achievement based on key performance indicators of its financial, market and operational activities. This set of key performance indicators defines the existing status of its key resources and capabilities, and shows if its existing vision, mission, goals and objectives have been achieved; variances in such achievement and performance are a key determinant in the HEI's future positioning. This analysis also helps in determining key "gaps" that could have an impact on or impair its future performance. It also helps to indicate what competences the HEI has, based on future opportunities and threats, that might affect its future position as well as supplying new aims and a new mission.
- **Future Timeline of 2010 (or the current year) to 2020:** As of 2010 (or the current year), once the institution is aware of its present positioning, it will need to determine what future position it intends to stake out in 2020, based on the opportunities and threats determined by the analysis. This calls for a review of its existing vision, mission and goals in order to design new ones based on an understanding of new trends and potential changes in the future environment. It also calls for the identification of a new set of capabilities to achieve this new position in 2010.

From the "capabilities" and "position" dimensions of strategic management, the HEI then needs to determine what capabilities it had utilized in the past and what new capabilities it now needs to achieve its future aims and its envisioned mission. These are:

- **Capabilities' dimension:** It is a widely accepted notion that achieving certain aspirations or levels of performance is based on a set of "capabilities" that underscore an organization's knowledge, skills and values or, in other words, the "competency set"; these bring about changes in performance as opposed to "status quo" or "mother luck" tactics. Such aspirations represent the HEI's future envisioned position that it intends to stake out in the competitive arena; this is defined in its mission which is created after a thorough examination of the external environmental factors that might affect its future position. The degree of performance or achievement in the highly competitive arena of education is contingent on the capabilities and capacities that the institution and its human talent have in utilizing its resources and processes to create and deliver educational value. Inevitably, analyzing these capabilities leads an internal analysis of the institution itself in terms of its human, information and organizational resources, together with their utilization. This, in turn, means that analyzing the internal environment will lead to identifying the "Strengths"

and “Weaknesses” of the institution regarding its competencies in utilizing its resources, rather than merely owning them. A full understanding of the organization’s capabilities is the key to achieving both its position and its mission.

- **Position dimension:** It is also a widely accepted notion that the human survival instinct is geared towards continuous improvement of its present position by aspiring to a higher level of standing. An institution, which is an organizational entity, is no different in this way from a human entity in striving towards fulfilling desires and ambitions higher than its present positioning. Furthermore, in order to achieve these higher aspirations, which are stated in its mission, an institution denotes a specific position that it intends to arrive at in the future. As such, it must understand its external environment by carrying out an audit of the external environmental factors that are likely to have an impact on the future position it has staked out. A full understanding of these external environmental factors leads to the identification of the “Opportunities” and “Threats” that might affect its strategic intent. These analyses will define the institution’s future vision, mission, goals and objectives, as well as the strategies that it defines in order to achieve this envisioned position.

2.2 Basic Planning Definitions

A good place to start in any strategic management is to define why the HEI exists and then to analyze what it has achieved based on the reasons it states for its existence. These calls for an understanding of what the HEI’s vision and mission are, as well as what overriding goals it has created to define the achievement of its mission. These goals must be measured in terms of performance achievements, which are defined in its objectives; they should be measurable and specific. A cross sectional analysis of the ranked Asian universities' visions and missions were stated implicitly and explicitly (Teay, 2011) as:

- **Envisioned outcomes desired of university**
 - community of learners and scholars who value the pursuit of new knowledge in a society of learning and are valued members and leaders of society, and global citizens effective in diverse settings
 - graduates who are well-balanced in knowledge and wisdom and are of good character, intelligent, able to think rationally, behave morally and ethically, possess life and leadership skills, conscious of public and common good, practice good governance and are socially responsible, world view competency and competent to compete in international job markets, and are socially responsible global leaders
- **Envisioned contribution of university**
 - betterment and benefit of potential of locality, society and mankind through raising, strengthening and transforming community and national potential, services to community for social, community engagement and outreach, economic and national development, preservation and enhancement of national heritage in arts, religious,

cultural and socio-cultural, socio-economic building that increase and achieve sustainable development and negotiating power competitiveness of country in the world community and ensuring the well-being, welfare, justice, security and sovereignty of the country and the world by upholding social and humanity values and in realizing peace.

- develop local human resources, nurture creative and entrepreneurial leaders with quality and virtue for society in a society of learning and wisdom through accessibility for acquisition of knowledge, in a variety of dimensions, formats and platforms through wealth creation, nation building and universal human advancement
- development of a dynamic, learned and morally strong society through contributions for the greater good of society while generating science, technologies and arts beneficial to and advances society with quality, beneficial and sustainable research, creativity and innovation and accountability for national and international society
- advancement of the world civilization by producing its graduates who have global insight, tolerance, sense of love for peace and high academic achievement with commitment to National Development and Social Responsibility and pursue universal principles that relate activities to the needs of the people and their aspirations for social progress and transformation
- generate, advance and disseminate knowledge and learning, expand human knowledge through quality research and education for the nation and for humanity with deep sense of social responsibility in improving the quality of life in society and harmonious development of moral and intellectual virtues in the implementation of university social responsibility.

The above exemplified some of the basic outcomes that these key universities desired of which are defined wither in their vision or mission, or even their values statement. Though vision and mission appears to be similar, there is a basic difference in that vision is more of a “dream” and mission is based on “a realistic set of final outcomes”. The following section offers basic definitions of the terms vision, mission, goals, objectives and strategies that are used generically in most of the existing strategic management literature.

- **Vision** – The vision will define “**what we WANT to be**”: a dream that the organization, university, school or program has for itself and would like to achieve; it defines a future POSITION where the organization, university, school or program wants to be. This might include:
 - Markets to be pursued,
 - Future technology, educational products, customer focus,
 - The kind of university, school or program that the management is trying to create.
- **Mission** – The mission will define “**what we CAN be**”; it also defines “**why the organization exists**”. In order to achieve the desired dream or position, the organization needs to define a set of CAPABILITIES: i.e. what the HEI or school and its units can do

to achieve that position. This might include:

- Current educational product and service offerings,
 - Customer needs being served,
 - Technological and business capabilities.
- **Goals** – Goals are specific “milestones” that must be accomplished in total, or in some combination, in order to achieve some larger, overall result, for example, the mission of an organization, university, school or program. The goals will define, in broad and general terms, “**what we want and can achieve**”. This represents the definition of a set of broad, achievable targets to reach the position that it intends to arrive at. Goals should be both action-oriented, should start with the infinitive of a verb (i.e. to....), and should be followed by the overall achievement or aim.
- **Objectives** – Objectives are specific and must be accomplished in total, or in some combination, to achieve the goals in the plan. Objectives are usually “milestones” along the way and are designed to measure the achievement of the goals and mission when strategies are implemented. The objectives will define how the achievements can be measured and will set targets that are challenging, achievable and measurable within a set time frame. Objectives are the end results of planned activity, i.e.:
- What is to be accomplished;
 - The time in which it is to be accomplished;
 - This should be quantified whenever possible.

Objectives Should Be SMARTER

The SMARTER objectives, using an example of writing a research paper, should be defined to cover the following criteria:

Specific: For example, it is difficult to know what someone should be doing if he/she is to pursue the goal to “work harder”. It is easier to understand the target of: “Write a research paper”.

Measurable: It is difficult to know what the scope of “Writing a research paper” really is. Thus, it is easier to appreciate what effort is required if the goal is to write a 30-page research paper to be presented at an international conference and published in a peer-reviewed proceeding or journal.

Acceptable: If a person is to take responsibility for the pursuit of a goal, the goal should be acceptable to him/her. For example, someone is not likely to follow the direction to write a 30-page research paper when he/she also has five other papers to write. However, if the person is involved in setting the goal, he/she can change any other commitments or modify the goal; then the person is

much more likely to agree to pursue the goal.

Realistic: Even if someone does accept responsibility for pursuing a goal that is specific and measurable, the goal will not be useful if, for example, it is to “Write a 30-page paper in the next 10 seconds” as this is unrealistic and does not identify the real efforts involved.

Time frame: It will mean more to others if realistic goals are set, such as “Write a 30-page research paper in 6 months”. However, it will mean even more (particularly if others are planning to help or guide you to reach the goal) if it is specified that I will write five pages every 30 days, rather than including the possibility that I will write all 30 pages on last day of the six-month period.

Extending: Goals should stretch the performer’s capabilities. For example, a person might be more interested in writing a 30-page research paper if the paper’s topic or the way it is written is likely to extend his/her capabilities.

Rewarding: A person will be more inclined to write the research paper if he/she is likely to be rewarded for the effort.

Difference between Goals and Objectives

A goal is an open-ended statement of what one wants to accomplish; its achievement is not quantified and no time criteria are set for its completion.

Objectives, on the other hand:

- Represent a commitment to achieve **specific performance targets** by a certain time,
 - Should be stated in **quantifiable** terms and contain a **deadline** for their achievement,
 - Spell out **how much** of **what kind** of performance **by when**
-
- Long-term objectives are results to be achieved in pursuing the organization’s mission with a time-frame of more than one year. They should:
 - * State direction
 - * Aid in evaluation
 - * Create synergy
 - * Reveal priorities
 - * Focus coordination
 - * Provide a basis for effective management.
 - Annual objectives are short-term milestones necessary to achieve long-term objectives. They:
 - * Represent the basis for allocating resources,

- * Are established at corporate, divisional, and functional levels,
 - * Are stated in terms of accomplishments for:
 - + management
 - + marketing
 - + finance/accounting
 - + production/operations
 - + research and development
 - + information system accomplishments.
- **Strategies or Activities** – These are the methods or processes required in total, or in some combination, to achieve the goals.
- **Tasks** – Particularly in a small university, school or program, people are assigned various tasks that are necessary in implementing the plan. If the scope of the plan is very small, tasks and activities are often essentially the same.
- **Resources (and Budgets)** – Resources include the people, materials, technologies, money, etc., required to implement the strategies or processes. The costs of these resources are often depicted in the form of a budget and they must be accounted for as they are key inputs in the transformation processes.

To reinforce the above key concepts, they can be summarized as:

- **Vision** – The vision defines “**what we WANT to be**”: a dream that the institution would like to achieve; it defines a future POSITION where the HEI, school and its academic or administrative units wants to be.
- **Mission** – The mission defines “**what we CAN be**” and also “**why the organization exists**”. In order to achieve the dream or position that the HEI or school wants to fulfill, it needs to define a set of CAPABILITIES of what it can do to achieve that position.
- **Goals** – Goals are specific accomplishments that define, in broad and general terms, “**what we want to achieve and can achieve**”. These are broad, achievable targets that state what the HEI or school will do and achieve, together with their vision and mission to reach the position that it intends to stake out.
- **Objectives** – Objectives are specific accomplishments that are usually “milestones” along the way. They are designed to measure the achievement of the goal and mission when implementing the HEI’s or school’s strategies. The objectives define “**what are the measures of the achievements**” and set targets that are challenging, achievable, measurable and within a set time frame. **Objectives are the end results of a planned project or activity** and should be SMARTER (i.e. Specific, Measurable, Acceptable,

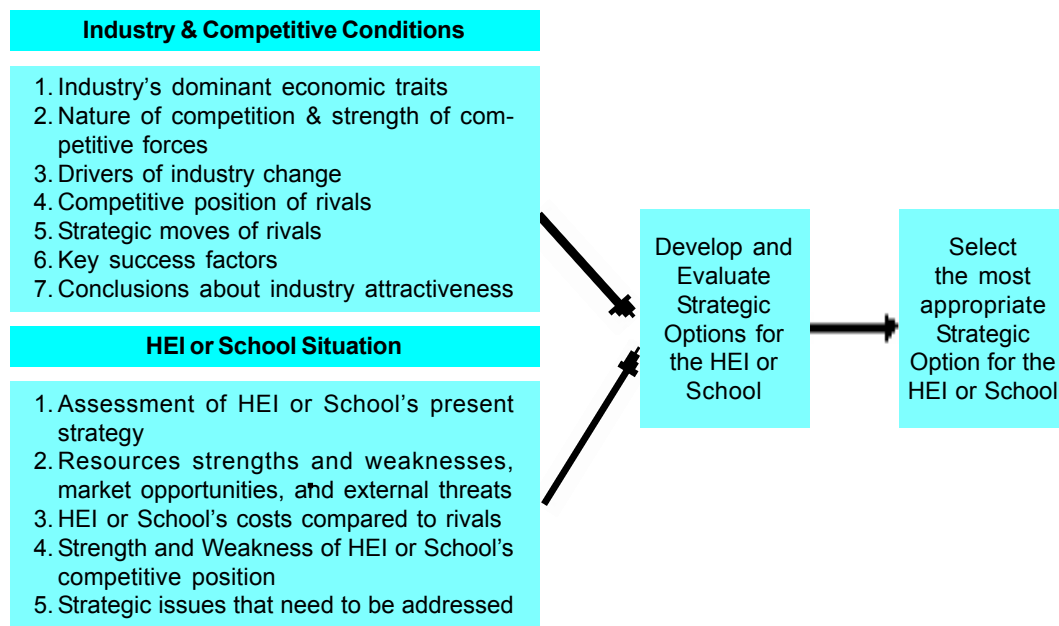
Realistic, Time- frame, Extending, Rewarding).

- **Strategies** – These define basically the “what to do” and “how to do it”. In most organizations, strategies concerning “what to do” generally involve whether to grow, maintain or exit. Once an HEI has decided to grow, it must decide “how to do it” or, in such a case, how to grow as various ways and approaches might be adopted.

2.3 Developing the Basic Strategic Plan

In developing the strategic plan based on the “capability” and “position” dimension outlined above, the HEI or school needs to conduct an analysis of external industries and competitive conditions, as well as an internal examination of the HEI’s or school’s situation, as shown in Fig. 2.1. In addition, the HEI or school should also define its vision and mission statement; this will also include the value system enshrined in the beliefs of the institution or school as an entity.

Figure 2.1: Internal and External Situation Analyses



Source: Adapted from Thompson, Strickland and Gamble (2007): *Crafting and Executing Strategies – The Quest for Competitive Advantage: Concepts and Cases*, 15th Edition, 2007, McGraw-Hill Irwin. pp. 20 - 30 and 11.

- 2.3.1 Writing the Vision Statement:** Write the vision statement by answering the question “What do you hope for your university, program, school and students and stakeholders?” Ideally, this should be written in a compelling, inspirational fashion.
- 2.3.2 Writing the Mission Statement:** Write a concise description of the purpose of your university, program or school. Answer the question: “Why does our university,

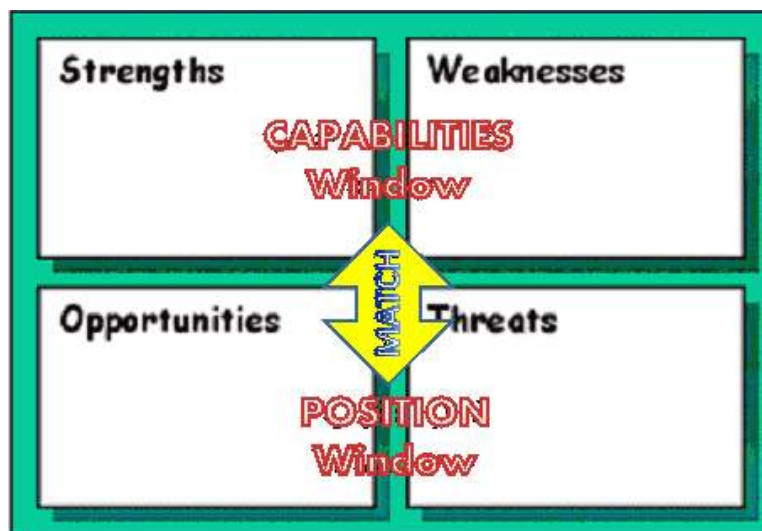
program or school exist?” When answering this question, include the nature of your educational products and the groups of students and stakeholders who buy or are affected by your educational products and services. The mission statement should provide continued direction and focus to your plans and operations in your university, school or program.

2.3.3 Writing the Value Statement: Write down the most important values on which you want your university, school or program to operate. The value statement depicts priorities in how the university, school or program carries out its activities with stakeholders.

2.3.4 Conduct an External Environment Analysis (OT): Write down your thoughts from an external analysis. An external analysis looks at the social, technological, political and economic trends affecting the institution, school or program: e.g., trends in the economy, recent or pending legislation, demographic trends, rate of access to trained labor, and competition. In your external analysis, do not forget to look at stakeholders’ impressions of the HEI, school or program, including bankers, students, community leaders, the employment market, parents, etc.

2.3.5 Conduct an Internal Environment Analysis (SW): Write down your thoughts from your internal analysis, including the major strengths and weaknesses of your institution, school or program. Write down the major threats and opportunities, and consider trends affecting your institution, such as the strength of programs, your reputation, the expertise of faculty staff, facilities, strength of finances, strength of administrative offices and operations, etc.

Figure 2.2: SWOT “Capabilities” and “Position” Matrix



As shown in Fig. 2.2, an analysis of the internal and external environmental factors will result in the traditional SWOT matrix where, in reality, “SW” represents the “Capabilities dimension” of the institution, and “OT” represents its “Position Dimension”. In formulating strategy, and as noted above, the performance and achievement regarding the envisioned future position are based on a set of capabilities that are needed to achieve that position. This inevitably means that the envisioned position must be matched to the capabilities, as shown in Fig. 2.1, and, in implementing the strategies; the capabilities’ dimension must also be built or created to achieve the position dimension.

2.3.6 Identifying the Strategic Issues

In essence, key strategic issues are:

- Future events or trends that may have a significant impact on the university, school or program (e.g. deregulation of an academic industry, signing the AFTA trade agreement or various FTAs, changes in the socio-cultural landscape, trends regarding the potential needs and expectations of students and graduates, national development trends); these should be closely monitored.
- Decisions that the HEI or school is considering making that will have a strategic and dramatic impact on the institution (e.g. merging with another university, school or program, changing strategy, focusing on international operations, etc.).

In identifying strategic issues, write down the major immediate and near-term issues that your institution or program must address, as shown in Fig. 2.1. New HEIs, schools or programs, in particular, are often better off by first looking at the major obstacles or issues that they face. Next, they should identify the more forward-looking, developmental goals that can be accomplished over the next few years. For example, current issues might be that the rate of student admissions is dropping, that no research and development is taking place to generate new educational products, the faculty turnover rate is too high, etc. Developmental goals for new HEIs, schools or programs might include, for example, creating an academic board, producing a strategic plan, carrying out a market analysis in order to design a new educational product, hiring new employees, etc.

In order to identify the key issues (Fig. 2.1) from the strategic analyses, consider the following guidelines:

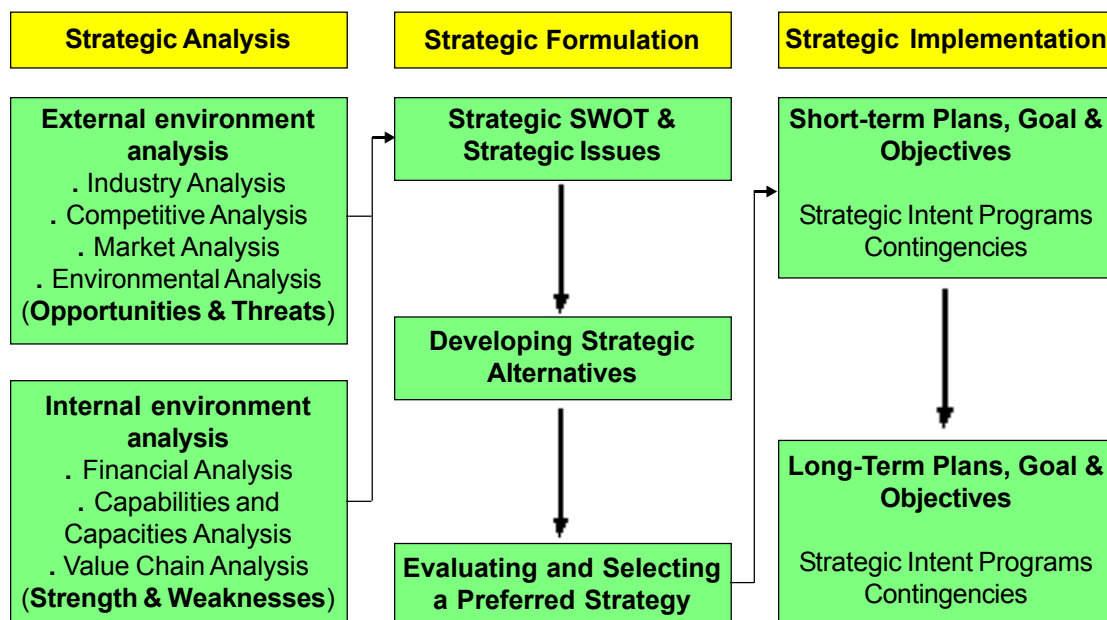
- i. From considering the effects of the weaknesses and threats that you identified, what major issues do you see? List as many as you can. Consider issues over the term of your strategic plan but look very closely at the next year in particular. Many institutions or programs have stumbled badly because they ended up “falling over their feet” while being focused too far down the road.

- ii. Consider each issue. Ask whether the issue is important i.e. does it have an **IMPACT** on and how does it affect the institution or program? Consider its occurrence (i.e. the probability of it happening) because if it does not happen, there will be no impact. Consider also its urgency as this normally defines whether the issue needs to be dealt with in the short-, medium- or long-term. Issues can seem very important but often their occurrence as urgent is negligible: for example, changing a flat tire is an urgent issue but you would never put “changing a tire” into your strategic plan. Attend only to the important issues, not the urgent ones.
- iii. Deal with issues that you can do something about. Issues that are too narrow do not warrant planning, and issues that are too broad will bog you down.
- iv. Issues should be clearly articulated so that someone from outside of the institution or program can read the description and understand the nature of the issue.

2.4 Guidelines in developing an HEI’s or School’s Strategic Plan

The development of the Strategic Plan through the Strategic Management Process, as shown in Fig. 2.3, should be conducted methodologically and systematically, as discussed below. Typically, the Strategic Management Process has three main phases of Strategic Analysis, Strategic Formulation and Strategic Implementation. These main processes cover the development of the Strategic Plan through internal and external environment analyses. Based on these two key analyses, the main outcome is a set of strategic SWOT outlines and the identification of the Strategic Issues. Based on this analysis, strategies can be developed, evaluated and selected that will finally lead to the strategies being implemented.

Figure 2.3: Strategic Management Process in a HEI or School



All three phases revolve around two key organizational issues:

1. **Position Perspective:** The identification and achievement of the final position that the HEI or school aims to achieve in the industry (2020).
2. **Capability Perspective:** The identification of the capacity and capability which are necessary to achieve the position that the HEI or school is aiming for (2020).

2.4.1 Strategic Analysis

1. **Conducting the Situation Analysis (SWOT):** The HEI or school works within two environments:
 - a. **External Environment:** The aim here is to identify the opportunities and threats facing the HEI or school. The key is to identify how these might **IMPACT** (that is, what sort of **effect they might have or what they might mean to the HEI**) on the future position, and how the HEI or school is and will be addressing the impacts identified in the Opportunities and Threats. Some of key external areas that should be addressed are:
 - i. **Macro Environment:** It is necessary to define the business, political, economic, socio-cultural and technological contexts affecting the future position of the HEI or school.
 - ii. **Industry Environment:** It is also necessary to define competitiveness, the demand and supply power of buyers and suppliers, substitutes, and threats of entry into the industry.
 - iii. **In-depth Competitive Analysis:** A Competitive Benchmark Matrix Analysis can be used to determine what and how well the HEI or school is performing in meeting the buying criteria of customers.
 - iv. **In-depth Customer Analysis:** The value of the customer must be understood and then it is necessary to check whether the HEI or school is delivering this value in terms of: Product Quality (final academic and social outcomes); Service Quality (all support services other than the main teaching/learning/research and community services); Image (the brand name and perception of the HEI or school); and Relations (engagement with all stakeholders). All of these are offered at a Cost, which should include all direct costs, such as pricing and transportation, and the intangible costs, such as finding opportunities, and committing time and mental effort.
 - b. **Internal Environment:** The aim here is identify the Strengths and Weaknesses of the HEI or school and the key is to identify the institution's real position (i.e. relative to the HEI's or school's competitors). This represents the institution's capacity and capability and refers to the utilization of resources, NOT just the fact of having them.

This will affect both the present and future achievements and position of the HEI or school and will, in turn, result in recognizing the Strengths and Weaknesses.

- i. **Value Chain Analysis:** Using the Input/Process/Output/ Outcome, and based on identifying the “gap in the differences between what is expected and what is actually done”, it is then possible to recognize what and how all aspects of these internal processes create or add value to the customer value equation outlined earlier.
 - ii. **Systems Analysis:** This includes all the other supporting systems, shared values, skills, staff, structures, strategies and style of management that create levels of value or performance of the HEI or school. (Hint: did (i) and (ii) above result in any differentiating selling points or something unique about the HEI or school that competitors could not offer or copy?)
 - iii. **Capabilities and Capacities Analysis:** This is used in this book as the main analytical framework; it is based on the capabilities and capacities of the HEI or school to create and deliver the proposed education value to society at large. As proposed, the success of the human, information and organizational capabilities and capacities forms the foundation of the overall success of the HEI or school. As such, it is more appropriate to determine the performance of the HEI or school based on both the existing and the required set of capabilities and capacities.
- c. **Identify the Present Status of the Achievements of the Institution:** As the HEI or school already has its vision, mission and goals, it must then be determined whether HEI or school has achieved these by identifying the KPIs (Key Performance Indicators) as these will be inputs into the SWOT:
- i. Market KPI
 - ii. Financial KPI
 - iii. Operational KPI of all its systems
 - iv. The unique selling point or points of difference that will make students select that particular product.

What needs to be done by the HEI or School?

- i. Set up a task force to identify the SWOT of the HEI or school and determine how the SWOT will affect its position based on its existing set of capabilities together with the new set of capabilities it needs in order to achieve its future position.
- ii. The task force can be divided into two groups: one to identify the internal environment and the other the external environment.
- iii. On the appointed date, each group should defend the SW and OT situations that have been identified. (*Justification is achieved by referring to facts, data or evidence; therefore research is needed.*)

- iv. Through consensus brainstorming, the task force needs to arrive at a consensus for the SWOT of the HEI or school. The top 5 - 8 points should then be prioritized based on the weightings and ratings methodology, to arrive at the strategic SWOT (the SWOT that is critical to the HEI or school).
- v. Based on the strategic SWOT, the key issues of the school should then be identified. These are the key decisions that must be made or the key problems that affect the future of the HEI or school.
- vi. **→Outcomes:** (1) The strategic SWOT, as shown in the figure below, and (2) the strategic issues.

Figure 2.4: Sample of the Outcome of a Strategic SWOT

Potential Resource Strengths	Potential Resource Weaknesses	Potential HEI Opportunities	Potential External Threats
<ul style="list-style-type: none"> - Powerful strategy - Strong financial condition - Strong brand name image/reputation - Widely recognized market leader - Proprietary technology - Cost advantages - Strong advertising - Education Product innovation skills - Good customer service - Better education - Alliances or JVs 	<ul style="list-style-type: none"> - No clear strategic direction - Obsolete facilities - Weak balance sheet; excess debt - Higher overall costs than rivals - Missing some key skills/competencies - Subpar profits - Internal operating problems - Falling behind in R&D - Too narrow education product line - Weak marketing skills 	<ul style="list-style-type: none"> - Serving additional customer groups - Expanding to new geographic areas - Expanding education product line - Transferring skills to new education products - Vertical integration - Take market share from rivals - Acquisition of rivals - Alliances or JVs to expand coverage - Openings to exploit new technologies - Openings to extend brand name/image 	<ul style="list-style-type: none"> - Entry of potent new competitors - Loss of sales to substitutes - Slowing market growth - Adverse shifts in exchange rates & trade policies - Costly new regulations - Vulnerability to business cycle - Growing leverage of customers or suppliers - Reduced buyer needs for education product - Demographic changes

Source: Adapted from Thompson, Strickland and Gamble, (2007); *Crafting and Executing Strategies – The Quest for Competitive Advantage: Concepts and Cases*, 15th Edition, 2007, McGraw-Hill Irwin. pp. 20 - 30 and 11.

2.4.1.1 Review and Revise the Vision, Mission and Strategic Goals of the HEI or School

- a. **Identifying the future position: Revising is not easy but is simplified if the task force has made a thorough external analysis:** e.g. analyses of the macro environment, the industry, competitors and customers. These identify key changes in the external environment, key trends and the new operating environment that will affect the future position of the HEI or school. The key changes derive from the Opportunities that exist for the HEI or school in order to re-position itself and to mitigate the perceived Threats. This will assist in identifying the position that the

institution aims to achieve and will result in revised visions and missions for 2020 for the HEI or school.

- b. **Identifying the new set of capabilities and capacities:** As noted, in order to achieve a new future position, the existing set of capabilities and capacities needs to be strengthened. New sets are also needed as the new trends and changes inevitably require a new set of capabilities.
- c. **Identifying the differentiating or unique selling point of the HEI or school:** As the HEI or school does not want to offer the same type of education as competitors; unique selling points must be identified as the stakeholders will use these as the basis for selecting the HEI or school above others.
- d. **Identifying the strategic goals:** As the vision and mission are broad and comprehensive, the key components of these need to be broken down into “what the HEI or school wants and can achieve”.
- e. **Identifying the objectives for each of the goals:** As a goal is generic, SMART objectives (i.e. those that are Specific, Measurable, Achievable, Realistic and Timely) represent the measures of achievement in terms of targets and key performance indicators.

What needs to be done by the HEI or school?

- i. Using facts, data and evidence, the task force (selected for its diverse representation, expertise, dedication and commitment) will need to identify its “envisioned new future position” resulting in a vision and mission. However, these must be determined within the context of the “changes and the new set of capabilities” that are required.
- ii. With the vision and mission defined, the task force will need to identify strategic goals that cover ALL aspects of the mission; they must clearly address what the HEI or school wants to achieve. This must be a comprehensive and generic set of strategic goals that are guided by the mission as the mission is broken down into a set of broad achievements. This does not define small details concerning what to do or how to do it, or small measures, targets or objectives.
- iii. The HEI’s or school’s values should also be defined as these constitute the spirit of what unites the institution and are concepts that all members subscribe to. This set of values defines what the institution is, together with the actions that support this realization. They basically define “the way we do things—the culture and value system”.
- iv. With the goals specified, specific SMART objectives should be identified for each goal so that the achievement of each one can be measured. Normally, there are many objectives and targets as there is a variety of actions that can be developed to achieve each strategic goal.

→ **Outcomes:**

- **Vision** – “what we **WANT** to be”: the **POSITION** that we want to reach.
- **Mission** – “what we **CAN** be”: this defines “why the organization exists” OR “the purpose for its existence”, based on its **CAPABILITIES**.
- **Goals** – “what we want and can achieve”.
- **Objectives** – “the measures of the achievements”; these must be SMART.
- **Strategies** – the “what to do” and “how to do it”.

2.4.2 Strategic Formulation

Formulating the strategies calls for **MATCHING** the capabilities to the position that the HEI or school has envisioned, or matching the SW to the OT. This means that the HEI or school should use its SW (capabilities) to achieve its OT (position). Normally, identifying a key strategic theme, (e.g. being an HEI or school of AAA academic excellence”), will help in ensuring that the developed strategies are aligned and interrelated. It should be noted that developing strategies basically means determining the “what to do” and “how to do it”; these depend on the capabilities that the HEI or school has. The higher the levels of capabilities and capacities, the more likely the achievement of what the HEI or School intends to do to achieve its staked-out position. This means that the success of these achievements depends on the existence and development of the needed capabilities and capacities.

There are many methods that can be used to determine the strategies but, as noted earlier, successful achievement depends on the institution’s capabilities. A simple way to determine these strategies is to use a TOWS matrix (Wheelen and Hunger, 2004). This matches the SW to the OT, resulting in suitable strategies, as shown in Fig. 2.5 below:

Figure 2.5: TOWS Matrix of matching the "Capabilities - SW" to the "Position - OT

EXTERNAL FACTORS (EFAS) \ INTERNAL FACTORS (IFAS)	INTERNAL FACTORS (IFAS)	Weaknesses (W)
	Strengths (s) List 5-10 internal strengths here	List 5-10 internal weaknesses here
Opportunities (O) List 5-10 external opportunities here	SO Strategies Generate strategies here that use strengths to take advantage of opportunities	WO Strategies Generate strategies here that take advantage of opportunities by overcoming weaknesses
Threats (T) List 5-10 external opportunities here	ST Strategies Generate strategies here that use strengths to avoid threats	WT Strategies Generate strategies here that minimize weaknesses and avoid threats

Source: Adapted from Weihrich (1982); The TOWS Matrix – A Tool for Situational Analysis, Long Range Planning, April 1982, pp. 60 and Wheelen and Hunger (2004); Strategic Management and Business Policy, 9th Edition, 2004, Pearson Prentice Hall, pp. 9, 10, 69 - 74 and 138.

Strategies are normally divided into two levels:

- Strategic level or main organizational strategy of “**What to do**”; normally there are only three main sets: i.e. grow, maintain or exit.
- Tactical level or competitive strategy of “**How to do it**”; this defines how to compete. Normally, there are various ways and means; these fall into the area of implementation.

In using the TOWS Matrix, the SO, WO, ST and ST strategies should:

- Identify the main “organization strategy”, which is “what to do”.
- Align together within the same strategic theme.
- NOT identify the “How to do” as this is defined in the strategic implementation.

What needs to be done by the HEI or school?

- i. Based on the strategic SWOT, strategic issues and the newly revised VMGO, the task force should identify its strategies using the TOWS matrix to find “What to do”. The SWOT in itself is useless if it is not analyzed and interpreted. The key is to think outside of the box: to identify what is going to differentiate US from THEM. This calls for strategic brainstorming on the part of the taskforce.
- ii. The Strategies should generally cover all the key areas pertaining to the achievement of the future position based on the new sets of capabilities.
- iii. The big picture should be thought of as the small picture. Details of “how to do it” are part of the implementation or action plans.
- iv. The Strategies should then be translated into actions. Well- developed and defined strategies are of no use if they are not implemented.

2.4.3 Strategic Implementation

Strategic implementation enters the domain of actual implementation. This is the most difficult part as it calls for:

- A change in the mindset, culture or value system, tying together the success of all the departments in the school or the schools in the HEI through strong leadership and clusters of change agents.
- A change in the paradigm of management as all the departments must carry out Steps 2.4.2 to 2.4.4 at a departmental level and align their strategic plans with that of the HEI or school; this must be more simplified and action oriented.
- Changing to an action-oriented set of action plans for each of the strategic goals and strategic objectives.

To this end, strategic implementation identifies:

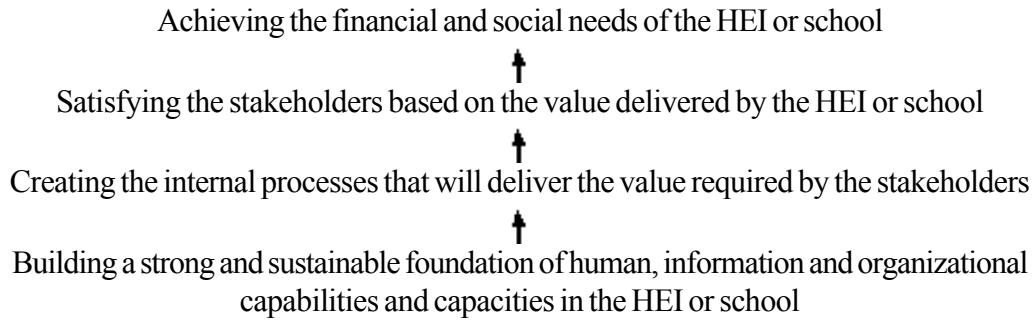
- The key human, information and organizational capabilities and capacities that form the foundation of success for the HEI or school.
- The internal processes needed to create the value required by stakeholders.
- The satisfaction of the stakeholders based on the value delivered by the HEI or school.
- The achievement of the financial and social needs of the HEI or school.

What needs to be done by the HEI or school?

- i. Successful implementation calls for leadership at the top level with a drive to bring about changes in terms of mindsets and regarding the culture of change, as well as the capabilities to drive home the needed changes.
- ii. The next level is to develop catalysts for change with the mandate to grow the seeds of such change in order to bring about the leadership's vision, together with the drive to implement the strategies. A willingness to change will contribute to the mechanisms and systems set up for strategic implementation.
- iii. To simplify the implementation, the HEI or school can use the "Balanced Scorecard" approach to identify key performance indicators in all the four key perspectives above and the seven "S" areas below. This is based on the principle of "management through measurement".
- iv. The task force might need to be broken down into smaller groups of two to three per group to identify and address the "what to do and how to do it" or key actions, systems, processes, mechanisms in the key areas. These areas that needs to be addressed are:
 - a. **Strategy** – Identify and develop detailed action plans concerning the necessary capabilities and capacities and then BUILD these capabilities and capacities. This enters the realms of "how to do" and real action plans, based on strategic goals and objectives.
 - b. **Structure** – Identify and develop any changes that need to be made to the governance or administrative structure to streamline channels of command and lines of authority in order to facilitate everyone carrying out their roles, responsibilities and accountabilities.
 - c. **Systems** – Identify and develop the capabilities and capacities of the internal systems of the institution in order to achieve directly the teaching/learning/research of the HEI or school, together with the external support systems needed from the administrative service and supporting units. This details what information and support services are needed, and how they are to be created and delivered to support the achievement of the mission and goals of the HEI or school.
 - d. **Staff and Skills** – Identify and develop the capabilities, capacities and competencies of the faculty members and staff; a new set will need to be developed on a continuous and long-term basis to achieve the success of the HEI or school.

- e. **Style of management** – Identify and develop the capabilities and capacities of management at all levels of the administration; this must bring everyone on board for the never-ending journey of continuous quality improvement.

When identifying the above, the following BSC approach must be kept in mind:



→ **Outcomes:** (1) A set of action plans for the HEI or school and (2) A set of strategic action plans for the schools or departments with clear KPIs delineating responsibility and accountability.

Summary

This chapter reviews the strategic management of the HEI or school from the point of view of “Capabilities” and “Position”. These are used as the main framework for developing strategic management and carrying out the processes outlined in this book. In looking at the basic planning terminology of the vision, mission, goals and objectives, the objective is to determine the vision and mission based on the capabilities and capacities needed to achieve a previously staked-out position. As the vision defines “what the HEI or school wants to be in the future”, it needs to define what capabilities and capacities are needed to achieve the purpose or mission regarding “what the HEI or School can be or can do”. The same holds true for the goals and objectives, as the goals define “what the HEI or school wants to achieve”; this will be translated into a measureable set of capabilities and capacities in terms of Key Performance Indicators or measures.

All the strategic management processes of the strategic analysis, the strategic formulation and the strategic implementation are also discussed within the perspective of capabilities and position. Ultimately, strategic analysis determines the set of capabilities and capacities that has been used to achieve the institution’s present position. It is also important to define a new set of capabilities and capacities that is critical to the achievement of a future position. The outcome of the strategic analysis is the SWOT; this is basically the capabilities and position spelt out in terms of their SW (i.e. the Strengths and Weaknesses of the capabilities and capacities) and OT (i.e. the Opportunities and Threats regarding the institution’s position).

Based on the strategic analysis, the formulation of strategy calls for matching the capabilities with the position, since the degree of achievement is based on formulating an appropriate set of capabilities and capacities that are needed in order to achieve a certain position. Once the strategies have been formulated, they have to be evaluated and selected to determine a feasible, acceptable and suitable set of strategies that are appropriate to the HEI or school.

With the strategies selected, the key is successful implementation. This calls for the creation of the necessary human, information and organizational capabilities and capacities. As all of these are based on human nature, the difficult part is to create the necessary human capabilities and capacities to use the information within complex organizational systems, structures and cultures. A recommended approach is to use the Balanced Scorecard approach as the management system for the implementation of strategies to assure of the alignment and measurement of appropriate key performance measures of the linked perspectives.

References

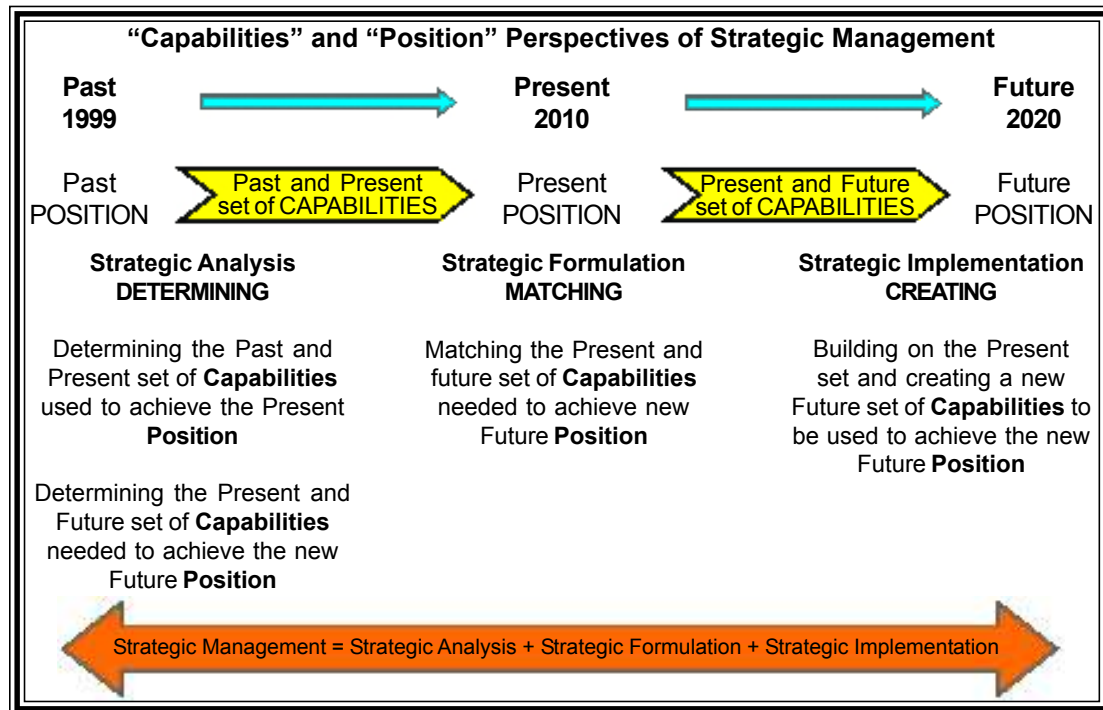
1. Teay, S., (2011), From CSR to USR: A Strategic USR Management Framework, presented at 7th QS-APPLE Conference, Manila, 16th - 18th November 2011
2. Thompson, A. A., Jr., Strickland III, A.J. and Gamble. J.E. (2007); *Crafting and Executing Strategies – The Quest for Competitive Advantage: Concepts and Cases*, 15th Edition, 2007, McGraw-Hill Irwin. pp. 20 - 30 and 11.
3. Wheelen, T. L. and Hunger, D. J. (2004); *Strategic Management and Business Policy*, 9th Edition, 2004, Pearson Prentice Hall, pp. 9, 10, 69 - 74 and 138.
4. Weihrich, H. (1982); The TOWS Matrix – A Tool for Situational Analysis, *Long Range Planning*, April 1982, pp. 60.

Chapter 3

Internal Environment Analysis and Assessment

Objectives of the Chapter

- To understand why an internal environment analysis needs to be undertaken.
- To understand what internal environment analysis is about within the context of the “capabilities and position” perspective of strategic management.
- To understand the strategic capacity and capability framework of the HEI.
- To understand the strategic capitals in HEIs.
- To understand the use of the analytical framework of the strategic capacity and capability of HE institutions to determine the Strengths and Weaknesses of the HEI or school.
- To understand the operationalization of the human, information and organizational capital capability and capacity assets and use the strategic capability and capacity assessment to identify the Strengths and Weaknesses of a HEI or school.
- To understand what the value chain of a HEI or school is and how to use “gap analysis” to determine the addition of value to the education products offered in the HEI or school.
- To understand the financial analysis of the HEI or school.
- To understand the mechanisms used in identifying the strategic factors of the internal environment analysis.



3.1 Internal Environment Analysis

A very first step in understanding the performance of the HEI or school is to conduct a strategic analysis of the institution as the HEI or school has two operating environments: an internal set of mechanisms or systems which it is using to achieve its goals and objectives and a greater set of external mechanisms or systems that can influence its overall competitiveness or its standing in the industry. As such, in the first phase of strategic management, the HEI or school needs to analyze and understand fully its internal operational and organizational environment to determine how it is performing, based on its existing set of capabilities and capacities (Chung, and McLarney, 1999).

In the internal environment analysis, the main aim is to identify the Strengths and Weaknesses in order to understand what strengths the HEI or school has utilized or capitalized on to achieve its present position in 2010. As noted by Sun Tzu who penned the “Art of War” in the 6th Century BC [as translated by Giles (2005), Wing (1988) and Wee (2003)], a basic requirement is to understand and prepare oneself, as noted in the famous adage: *“If you know both yourself and your enemy, you can win a hundred battles without a single loss”*. If the HEI or school does not recognize its capabilities and capacities (that is, its strengths and weaknesses) it can undermine its ability to compete effectively against its rivals. This is the survival of the fittest, which is based on the survival of those with the highest level of capabilities and capacities, as these constitute the competitive advantage that one depends on to compete with others. To prepare itself for the future, and to achieve an envisioned future position in the education industry, the institution will need to identify what strengths it presently has that can be used, and what set of strengths is needed to achieve its strategic mission, goals and objectives. This basically constitutes the strengths that the HEI or school has already built to gain advantage over its competitors.

At the same time, the HEI or school also has to identify what obstacles or constraints it has encountered in its internal mechanisms and systems that have hampered its reaching the envisioned position in 2010. These represent the weaknesses that the HEI or school must minimize or remove when it strives to reach this future position.

Thus, the analysis of the internal environment needs to identify the following:

- The set of capabilities and capacities that the HEI or school had utilized in the past and up to the present in order to achieve its present position in 2010.
- The new set of capabilities and capacities that the HEI or school will need to create or build in order to achieve a new staked-out position in 2020.

Ultimately, the internal environment analysis identifies the capabilities and capacities the institution will need in order to achieve its staked-out position in 2010. These represent the strengths that need to be created and the weaknesses that need to be minimized (in other

words, the Strengths and Weaknesses of the HEI or school as shown in the SWOT analysis).

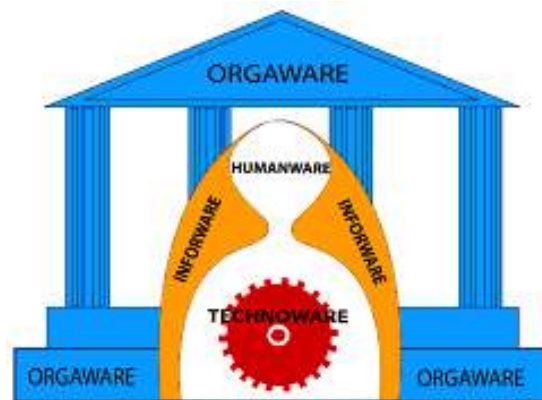
To identify the strengths and weaknesses, the HEI or school needs to approach the SWOT analysis systematically to ensure that it identifies the key or “real” strengths and weaknesses. This is opposed to just brain-storming aimlessly which might not identify a comprehensive set of strengths and weaknesses. As such, this book approaches the SW of the SWOT analysis from the “capabilities and position” perspective of strategic management, the concept upon which this book is based.

The three main analytical frameworks illustrated in this book are:

1. The Strategic human, information and organizational capabilities and capacities of the HEI’s or School’s analytical framework,
2. The Value Chain and Value added gap analysis analytical framework,
3. The Financial position and performance analytical framework.

3.2 Strategic Capacity and Capability Framework of HE Institutions

Figure 3.1: The House of Learning



Source: Teay (2007); HE through the Sufficiency and Sustainability Lens, Proceedings of 7th Annual SEAAIR Conference, Bangkok, in "Sufficiency and Sustainability in Higher Education: An Agenda", September 2007, pp. 456 - 468.

The HEI’s House of Learning, as a business model, (Hamermesh, Marshall and Pirmohamed, 2002) is depicted in Figure 3.1 and typifies the conventional organization in terms of input-processes-output-outcome (IPOO). The difference is the context and the content of the IPOO. Key inputs are the tangible infrastructure and the intangible instructors and students; these interact within strategic and objective guided teaching learning-research environments to turn students into whole people (intellectually, mentally, physically, spiritually, ethically and morally) who market themselves in the employment market.

Figure 3.1 shows the dynamics of the interaction of the Humanware (H) in using the Technoware (T) to generate the human-based Inforware (I) that are carried out within the Orgaware (O) context; the mechanisms for their work are also shown. This shows that it is imperative for the organization to manage the THIO using an integrated approach with the human capital playing a key role in the utilization of the resources since these are the very foundations of the organization. In support of this, it should also be noted that, in Kaplan and Norton's 2001 and 2004 strategic management of the human, information and organizational capital, these are intertwined dependently rather than independently; this strategic capital is the foundation of the organization whereby value is created. The intangible interdependency of strategic capital assets (i.e. HC/IC/OC) is clearly illustrated in Figure 3.1. With this in mind, the underlying theme for the HE organization's management is that the strategic capital assets of the HC/IC/OC must be integrated and viewed dynamically as they are inter-locked into an integrated model for managing the "capacity and capability" aspects of the strategic capital. This integrated framework is better able to manage the key capabilities of the human capital in terms of its degree of competency, and employs the capacity of the information capital within the organization to use the internal processes to create and deliver education value. The major dimensions of TCOMPS are:

1. **TECHNOWARE (T):** Object-embodied physical facilities (*tools, equipment, machinery, structure*) → Technoware is the technologies that assist and amplify human powers and that control transformation processes.
2. **HUMANWARE (H):** Person-embodied human abilities (*skills, craftsmanship, expertise, dexterity, creativity, capability and capacity*) → Humanware is the capabilities and capacities or the degree of human sophistication in the organization, defined in terms of knowledge, skill, values, productivity orientation, achievement orientation, creativity orientation, and motivation.
3. **INFORWARE (I):** Record-embodied and documented knowledge (*facts, formulae, design parameters, specifications, manuals, theories*) → Inforware is the information that enables quicker learning and the acquisition of knowledge in terms of time and resources through the tacit (individual or human-based) and explicit (public or organization-based) knowledge.
4. **ORGWARE (O):** Institution-embodied organizational frameworks (*methods, techniques, organizational frameworks, shared values, systems and management practices*) → Orgaware is the organization's systems and infrastructure, structure, shared values and culture, strategies, staff and skills and their synergies. It achieves the alignment, utilization and coordination of activities and resources in order to achieve the desired results.

As noted, human capital lies in the center of all successes and failures based on the degree of human sophistication (Humanware), a person's capabilities and capacities to utilize technology (Technoware), a person's degree of technical capability to generate information (the Inforware); this is the documented knowledge whose value is extracted through human interpretation and integration and affects the rationale, logic and reason of action. These processes take place

entirely within the context and content of the organization's styles, philosophies, value systems, mechanisms and techniques (collectively called the Orgaware) (Teay, 2008; Pramongkit and Teay, 2002). This shows that the THIO is a more appropriate and a more powerful explanatory and exploratory framework to understand Human Capital – the Human DNA. Success or failure is linked to the inter-linkages and interplay of the THIO domains.

3.2.1 Strategic Capitals in Higher Education Institutions

Cheng (1995) succinctly highlighted the complexity of the education system as interrelating sets of technical-economic, human-social, political, cultural and educational functions at individual, institutional, community, social and international levels. The implications for a HE institution is that the success of the “transformation” of the institution lies in creating a strong foundation embedded in the intangibility of the competency of the human, information and institutional capital (Kaplan and Norton, 1996, 2001 and 2004) as this is the foundation of an institution's success from which competitive advantage can be acquired. This supports the professional-artistry paradigm which views the study of education and quality as a practical art rather than a scientific approach, leading to indicators that are temporary, dynamic, problematic and contextualized rather than absolute and permanent (Fish, 1992). These three sets of strategic capital assets, noted above, are:

- i. ***Human Capital (HC)***: This comprises the knowledge, skills and values of academic and administrative staff in the creation of education value for the stakeholders.
- ii. ***Information Capital (IC)***: This comprises the IT systems, networks and databases that are horizontally and vertically integrated to support the empowerment of the personnel. A key competitive edge is the technological capabilities (Pramongkit and Teay, 2002) of the academic and administrative human sophistication in identifying, interpreting and integrating information into knowledge and market wisdom, thus leading to competent curiosity and competent wisdom (Barabba and Zaltman, 1991).
- iii. ***Organization Capital (OC)***: This comprises the leadership, teamwork, alignment and culture that form the operating core for all the other aspects to function in a total, integrated and open system.

As these strategic capital assets that are critical to the “transformation of the students” are intangible, Kaplan and Norton (2004) used “strategic readiness” as the proxy for measuring these capital assets in order to implement the strategy successfully. In terms of Human Capital, there is a need to determine the competency profile of the academic and administrative staff in terms of their knowledge, skills and values and also in terms of their strategic readiness to implement strategy successfully. In the Information Capital, strategic readiness is determined by the difference between the existing and needed information requirements such as the information infrastructure of the database, applications and communication network. For the

Institutional Capital, strategic readiness is determined by the difference between the existing and the needed leadership, culture, teamwork and alignment of the synergies of all the schools and administrative units. The use of “strategic readiness” as the proxy of measure for the intangible capital assets in the institution highlights those “capacity and capability” issues that must be managed strategically.

3.2.2 Analytical Framework of the Strategic Capacity and Capability of HE Institutions

The strategic intangible capacity and capability of an institution’s resources are its knowledge, reputation and culture, while its intangible human resources are embedded as the capabilities of academic and administrative staff in the form of knowledge, skills, and motivation, together with those communication abilities that affect job performance. Andriessen (2001) classified these unique bundles of intangible assets or the core competencies into: collective values and norms (client focus, reliability, and quality), processes (leadership and control, communication, management of information technology), explicit knowledge (patents, manuals, and procedures), and skills and tacit knowledge (know-how, talent and competencies).

Agenda 21 (Chapter 37, UNCED, 1992) and the UNDP Briefing paper (1991) defined capacity building as “the human, scientific, technological, institutional, institutional and resource capabilities” that emphasize the creation of an enabling environment with appropriate policy and legal frameworks. This environment also includes: human resources development, the strengthening of managerial systems, institutional development of management structures, processes and procedures, and relationships. Basically, capacity building focuses on “a series of actions directed at helping participants in the development process to increase their knowledge, skills and understanding, and to develop the attitudes needed to bring about the desired changes”, as noted by FAO (www.capacity.org, 2007).

Succinctly, Mentz (1997) asserted that the capability to achieve lies in institutional capability (capability utilization) rather than technical capability (availability of skills, methods, systems and technology). In operational terms, Cohen (1993b) highlighted: “to strengthen targeted human resources (managerial, professional and technical academic and administrative staffs) that can be marshaled and sustained effectively” or “the ability to perform appropriate academic and administrative tasks effectively, efficiently and sustainably” (Hiderbrand and Grindle, 1994). These complement Berg’s (1993) three main methods of capacity building: skill upgrading – both general and job-specific; making procedural improvements; and institutional strengthening.

3.2.3 Literature on Capability and Capacity Building Tools and Methodologies

Table 3.1: Key variables of the capacity assessment of capacity tools and methodologies

Tools and Methodologies	Key Description and Variables of Capability and Capacity
Effective Capacity Assessment for Non-Profit Organizations of McKinsey and Company (2001)	Designed to assess organizational capacity based on 7 key elements and their components of: Aspirations, Strategy, Organization Skills, Human Resources, Systems and Infrastructures, Organization Structure and Culture
Capacity Assessment Tool of CARE, Somalia	Designed to assess the capacity of an NGO/partner in 5 capacity areas of: Governance, Management Practices, Finance, Technical/Service Delivery, Organization Mission and Sustainability
Capacity change and performance assessment framework of European Center for Development Policy Management, ECDPM, August 2006	Focused on how capacity develops in an organization in the main capacity area of: Capability to survive and act, Generate development results, Relate with others, Adapt and self-renew, Achieve coherence
Organizational Capacity Assessment Tool of Marguerite Foundation	Designed to identify capacity strengths and challenges and establish building goals focused on 4 broad dimensions of: Leadership Capacity, Adaptive Capacity, Management Capacity and Operational Capacity
In - Country Self Assessment Tool for Natural Disaster Response Preparedness of Inter Agency Standing Committee (IASC)	Check list to assess current status of existing resources and capacities in a give country to manage disasters in terms of: Functional governance framework, Infrastructure, Awareness level, Preparedness level, Logistical arrangements, Capacity inventory, Collaborating arrangements and Human resources

Source: adapted from CADRI (Capacity for Disaster Reduction Initiative), <http://www.unisdr.org/cadri/>

Most of the research and frameworks for capability and capacity building have been developed for non-profit based or NGO based organizations in order to build capacity at a national, society and/or organizational levels to keep up with developing or developed nations. Only recently have these been adapted to business organizations and many of the key variables and processes have been adapted to suit the unique aspects of for-profit organizations. Table 3.1 highlights some of the models or frameworks that have clearly identified variables or factors in the assessment and development of organizational capacity. Literature on key capacity building process models have been left out in this review as the aim here is to identify what capacity variables are similar and can be generically adapted for any type of organization that wishes to assess and develop its organizational capacity.

As illustrated in the main variables of the capability and capacity models noted above in Table 3.1, these variables revolve around the following:

- Organization Aspirations and Mission Capability and Capacity
- Leadership Capability and Capacity

- Governance Framework and Capability and Capacity,
- Management Practices and Capability and Capacity
- Organization Skills and Operational Capability and Capacity
- Human Resources and Capability and Capacity,
- Development, Relations and Achievement Systems and Infrastructures + Capability and Capacity
- Adaptive Capability to Survive, Self-renew and Sustain Capability and Capacity,
- Organizational Structure and Culture+ Capability and Capacity

In developing the capabilities and capacities of an organization, there is a distinction between capabilities and capacities but they are inter-related in that capacity represents the contextual aspect, or the volume or degree or how the knowledge, skills and values are practiced within a certain context and the capability represents the content aspect of what the knowledge, skills and values are. The distinctive difference is in the context and content; normally context will shape content. A simple analogy is that the context is the glass that shapes the content, which is the water. This inherently means that the context of how the capability is developed shapes the content of the knowledge and skills when practiced. If the context is weak and immoral, the value of the knowledge and skills is diminished or superseded with ill intentions that lean towards promoting individual benefit at any cost going; this enters the murky area of greed that normally blinds legal and honest practices.

3.2.4 Operationalization of Capability and Capacity: Capital Sustainability

The operationalization of the capability and capacity sets uses an adaptation of Kaplan and Norton's (2004 and 2006) strategic capital definition of Learning and Growth in terms of Human, Information and Organizational Capital. The rationale, as previously expounded (Teay, 2007 and 2008), is that this is the foundation of the organization's strategic capital assets and is the organization's platform for using internal processes to create and deliver value for its customers and stakeholders. As also previously identified, the success of the strategic capital lies not just in having the resources and processes in place but in the human and organizational capability and capacity to use these resources and processes to create and add value. It is not only in the content (i.e. the type of capabilities that can be used) but the context (the capacity and its degree and level of utilization) which is of paramount importance. The earlier synthesized capability and capacity sets can be re-grouped within the strategic capital asset group of:

- **Human capital capability and capacity set**
 - "Soft" human – based capital capability and capacity
- **Information capital capability and capacity set**
 - Adaptive capability to survive, self-renew and sustain capability and capacity
 - Development, relations and achievement systems and infrastructures capability and capacity

- **Organizational capital capability and capacity set**
 - Organization aspirations and mission capability and capacity
 - Leadership capability and capacity
 - Governance framework capability and capacity,
 - Management practices capability and capacity
 - Organizational skills and operational capability and capacity
 - Organizational structure and culture capability and capacity

As most of the key components and variables of generic capability and capacity have been well identified in the multi-faceted and diverse set of literature on the topic, it is not the objective of this book to re-invent or re-hash the existing but divergent dimensions of the capability and capacity set. However, it is the objective of this work to adapt and operationalize these capability and capacity sets based on the existing literature as a matrix or model to analyze the internal dimensions of the human, information and organizational capabilities and capacities. It is also proposed that this will yield a reasonably strong set of strengths and weaknesses that truly reflect the internal capabilities and capacities of the HEI.

3.2.4.1 Human Capital Capability and Capacity Set

Studies in the literature have successively looked at the importance of competing through capabilities and competence (Prahalad and Hamel, 1990; Green, 1999; Sanchez, 2000). It is widely accepted that the competitive advantage of the organization, in terms of its capabilities and competence, is human-based (Namasivayam and Denizci, 2006). A major study by the University of Michigan concerning the identification of the Human Resource Model, 2003 (Garett-Owens, 2003) can be used as a foundation for the capability and capacity set of both the individual and the organization to build in sustainability of the human and organizational DNA, as expounded in the three strategic capital sets.

The International Labor Organization (2004) categorized three dominant job activities as: tacit – complex interactions; transactional – routine interactions and transformational – the conversion of raw materials. This work showed that jobs requiring tacit interactions were becoming more important, especially in developed countries (41%) and developing countries (26%). Beardsley, Johnson and Manyika (2006) suggested that these tacit interactions, unique to an institution, involved the exchange of information, the making of judgments, and the need to draw from multi-faceted forms of knowledge with co-workers, customers and suppliers central to the economic activity. Managing effective tacit interactions means managing the changes, learning, collaboration, shared values and innovations of the institution.

The competency clusters of academic and administrative capabilities needed for successful teaching-learning (Thorton and Byham, 1982) can be categorized as: Intellectual – strategic perspective, analysis and judgment; Interpersonal – persuasiveness, decisiveness; Adaptability – resilience; Results orientation – initiative, business sense. Houtzagers, (1999)

identified five sets of skills and competencies: Professional Knowledge, Customer Orientation, Business Awareness, Leadership, and Planning and Organizing. These five profiles had ten entities of: Professional Knowledge, Orientation, Relationships, Coaching, Leadership, Communications, Business Awareness, Analysis and Decisionmaking, and Planning and Organizing; these are difficult to copy from one institution to another.

Table 3.2: Teaching Competency Effectiveness Index

Capability and Capacity Competency Factor		Operational Elements of each of the Factors
TCEI 1	Providing a clear and emphatic learning environment	Knowledge Base, Teaching Goals, Organization for Student Learning, Communication, Enthusiasm for Discipline/Subject
TCEI 2	Promoting active student involvement	Active Participation, Opportunities for Practice
TCEI 3	Catering for students' learning differences	Identify Learning Differences, Cater for Learning Differences, Diagnose Misconceptions
TCEI 4	Assisting students to identify the outcomes of learning	Intended Outcome, Appropriate Tasks, Appropriate Feedback, Administration
TCEI 5	Engaging in self-development	Professional Development Activities, Seeking Feedback, Critical Reflection, Analytical and Critical Reasoning
TCEI 6	Developing the ability for effective teaching	Documentation of Current Practice, Issue Identification, Action Plan, Implementation, Evaluating Processes and Outcomes
TCEI 7	Conforming to a high level of professional ethics and values that are moderating	Identification of Values and Ethics, Inculcation of Values and Ethics, Implementation of Values and Ethics through a Moderating Approach
TCEI 8	Assuming a leadership role in program development	Knowledge of Operating Environment, Program/Unit Development, Evaluation of Program/Unit Effectiveness
TCEI 9	Knowledge Conditioning	Prudence and Care in Interpretation, Integration and Application of Knowledge
TCEI 10	Morality Conditioning	Honesty, Integrity, Sincerity, Perseverance, Diligence, Sharing,

Source: Teay (2008); "Sufficiency and Sustainability: Individual Capacity Building for HE" scholarly paper presented at the 48th Annual 2008 Association for Institutional Research Forum, Seattle, Washington, 24th May - 29th May, 2008.

The human element of knowledge (Chatzkel, 2002; Davenport and Prusak, 1998; Fowler and Pryke, 2003; Hildreth et al., 1999) is reflected in Blackler's (1995) description of knowledge as "multifaceted and complex, being both situated and abstract, implicit and explicit, distributed and individual, physical and mental, developing and static, verbal and encoded". This has led to the imperatives of tacit knowledge residing in people (Hendriks and Vriens, 1999). Kane et al., (2006) categorized knowledge into two groups of:

- **Individual/Tacit:** expertise or know-how that is manifested through action, acquired through practice, and is difficult to transfer. It is based on individual beliefs, values,

subjective insights or emotions that are contained in the container (technically the human's head) and is difficult to share, especially in a teaching-learning episode that is highly individualized. This is operationalized by the teaching competency sets through the effectiveness index, as shown in Table 3.2. This teaching competency index can be used to identify the gaps that still need to be developed in furthering the personal and academic development of instructors in terms of knowledge, skills and abilities that have a moral dimension. The full set of operationalization of the Human Capability and Capacity is shown in Table 3.3.

- **Public/Explicit:** the rationalization of information that can be stored, codified and transmitted. It can be articulated as facts represented in the form of documents, designs, patents, trademarks, business plans and formal language that are objective and rational and are about the container or embodiment of knowledge (Manesh and Suresh, 2004); this is the institutional memory (Anand et al., 1998) or systematic memory. Such knowledge is captured in the institution's manuals, procedures, databases, operational models and systematic rules that are easily shared amongst the academic and administrative units leading to knowledge sharing and transfer across all the stakeholders in the institution's community.

Table 3.3: Operationalization of the Human capabilities and capacity set

Human capital sustainability capability set	
Strategic Planning Capability	Individual and Organization as an entity produces through a disciplined effort, fundamental decisions and actions that shape and guide what an individual and organization is, what it does and why it does it.
Customer Orientation Capability	Individual and Organization as an entity seeks to understand customer expectations and requirements and uses available resources, policies and opportunities in their best interest without compromising individual and institutional values.
Leadership Capability	Individual and Organization as an entity demonstrates responsibility, administrative skills, as well as a commitment to and a vision for social service.
Ethics and Integrity Capability	Individual and Organization as an entity gives proper consideration of others, attempts to "do the right thing" and acts in a manner that is forthright and, clear and honest.
Achievement Orientation Capability	Individual and Organization as an entity has a strong sense of urgency about solving problems and getting work done; influences others at all levels and types of positions; gains others' support for ideas, proposals and solutions.
Relationship – Building, Collaboration and Partnership Capability	Individual and Organization as an entity establishes relationships, networks and partnerships that include a broad range of people and lead to joint projects aimed at developing policies, services and value-added products and services for human resources activities.
Self - Awareness and Professional Development Capability	Individual and Organization as an entity productively looks for opportunities to develop his or her own skills and related behaviors in areas of their expertise in an effort to maximize their performance and effectiveness.
Change Management and Organization Design Capability	Individual and Organization as an entity understands individual and organizational evolution as it aligns with values, vision and mission and can facilitate the processes necessary to foster appropriate change within the individual and organization to ensure consistency with those changing issues.
Communication Capability	Individual and Organization as an entity effectively uses formal and informal communication efforts to express concepts, strategies, information and inspirations that affect the listener in the desired manner.

Developing and Actioning Strategic Planning in HEI

People Management Capability	Individual and Organization as an entity demonstrates an understanding of the people management process as it relates to diagnosing the customers' and stakeholders' needs, developing a realistic response, planning an intervention and evaluating results in a manner that yields the desired outcomes.
Work Management Capability	Individual and Organization as an entity develops and maintains a workable plan and obtains resources to accomplish the overall goal of the work plans, manages and follows through to ensure the flow and timely completion of activities that deliver work results.
People Engagement Capability	Individual and Organization as an entity lets people know what they do matters, encouraging their professional growth and supervision of competencies.
Facilitation Capability	Individual and Organization as an entity uses human interaction and group processes skills to enable individual staff members, and groups or teams to resolve issues and plan initiatives with the goal of improving effectiveness and efficiency in the workplace.
Human capital sustainability capacity set	
Strategic thinking and HR Direction Capacity	Organization recognizes, explores, and uses a broad range of idea and practices for analysis and correlation between human resources trends and issues and establishment of links between human resources activities, the objective of the HEI and the needs of the customers.
Strategic Analysis, Metrics and Technological Expertise Capacity	Organization uses and applies technological support for human resources, evaluates new technologies and support systems, integrates technologies to support human resources activities, gathering information from measurement to develop successful customer-oriented decision making processes.
Strategic Staffing Capacity	Organization recruits, interviews, recommends and refers employees and applicants for employment, promotion or transfer; review records to identify candidates for employment, promotions and transfer; coordinate and conduct staffing program planning and administration activities.
Training and Development Capacity	Organization provides specialized expertise including lifelong learning, learning organizations, instructional design and knowledge transfers options to enhance knowledge, skills and abilities of employees.
Total Rewards – Compensation and Recognition Capacity	Organization develops and implements the philosophies, policies and programs for rewards for faculty and staff in concert with organization administration, faculty and operating units.
Benefits Management Capacity	Organization designs, develops, consults, supports and presents benefits programs for all institution employees throughout the employee life cycle.
Legal Regulations and Policy Management Capacity	Organization applies an understanding of key legal precedents, policies and practices to protect the interests of the institution and individual employees.
Complaints, Conflict and Dispute Management Capacity	Organization participates in furthering the formal processes of investigation – formal process of fact finding to reach a conclusive determination in support of complaint actions and employment related impact; and hearing – formal process of review to determine the appropriateness of the investigations and subsequent actions both of which enables opposing parties to move past impasse towards resolution of an issue through the application of dispute resolution techniques.
Performance Management Capacity	Organization establishes how they will work together to manage their actions to help the organization achieve its goals by establishing metrics of performance through ongoing communications partnerships amongst a staff member, customers and team members and management.
Transaction Management Capacity	Organization assists and advises administrators by managing HR systems and transactions, assessing and using HR data and information.

Source: Adapted from Garrett-Owens, Gurgevich, Katz, Mulay, Nystrom and Williams (2003); Human Resources Competency Model for Human Resource Professionals at the University of Michigan 2003, UM-HR Academy, 2003.

3.2.4.2 Information Capital Sustainability Capability and Capacity Set

Literature concerning Information Systems has emphasized hardware and software; only in the past decade has it focused on the use of IS/IT for competitive advantage. However, as noted by Teay (2008 and 2008) and others (such as Lederer and Gardiner, 1992; Lederer and Salmena, 1996; Lee and Bai, 2003; Lee and Hong, 2002; Shupe and Behling, 2006), deriving a competitive and sustainable advantage lies not simply in having the IT resources but in the capability of using the IS/IT resources; this is also human based. Based on this rationale, the sufficiency and sustainability of the information capability and capacity set will mirror that of the human DNA since, from planning to development and utilization, these are, in practical terms, a human-based capability as their utilization has a moral dimension. This supports the development of knowledge management (Kulkarni, and Louis, 2003; Kulkarni and Freeze, 2002) that is aligned towards a moral dimension in its utilization.

Institutional knowledge is a mixture of both tacit and explicit knowledge, while the role of knowledge management is to unlock these forms of knowledge and use them as assets. Knowledge management is essentially the transfer of knowledge to others who need it for carrying out their responsibilities within the institution. This transfer from students to lecturers, staff to administrators, academics to administrative staff and viceversa is a synchronous communication between “speaker” and “listener” whereby information must be interpreted and integrated into knowledge (Haeckel, 1987), together with the rest of the knowledge that an individual possesses (Mahesh and Suresh, 2004), leading to wisdom. Knowledge transfer is about connection (Davenport and Prusak, 1998) and not collection (Dougherty, 1999); von Krogh et al. (1996) referred to it as “knowledge connection” that is made up of formal and informal relationships. Amidon (1997) went one step further to describe knowledge innovation “as the creation, evolution, exchange and applications of new ideas into marketable goods and services”. The operationalization of the Information capabilities and capacity set is shown in Table 3.4.

Table 3.4: Operationalization of the Information capabilities and capacity set

Information capital sustainability capability set	
Strategic Information Planning Capability	Individual and Organization as an entity produces through a disciplined effort, fundamental decisions and actions that shape and guide what an Information System and organization is, what it does and why it does it.
Information based Customer Orientation Capability	Individual and Organization as an entity seeks to understand customer expectations and requirements and uses available resources, policies and opportunities in their best interest in the information context and content that is customer focused without compromising individual and institutional values.
Information Leadership Capability	Individual and Organization as an entity demonstrates responsibility, administrative skills, as well as a commitment to and a vision for its information services.
Information Ethics and Integrity Capability	Individual and Organization as an entity gives proper consideration of others, attempts to "do the right thing" and acts in a manner that is forthright and, clear and honest rationally and that are fact and evidenced based.
Information Achievement Orientation Capability	Individual and Organization as an entity has a strong sense of urgency using information about solving problems and getting work done; influences others at all levels and types of positions; gains others' support for ideas, proposals and solutions.

Developing and Actioning Strategic Planning in HEI

Information Relationship – Building, Collaboration and Partnership Capability	Individual and Organization as an entity establishes relationships, networks and partnerships that include a broad range of people and lead to joint projects aimed at developing policies, services and value-added products and services for human resources activities that are based on information that is fact and evidenced based.
Information based Self - Awareness and Professional Development Capability	Individual and Organization as an entity productively looks for opportunities based on information that is fact and evidenced based to develop his or her own skills and related behaviors in areas of their expertise in an effort to maximize their performance and effectiveness.
Information based Change Management and Organization Design Capability	Individual and Organization as an entity understands individual and organizational evolution as it aligns with values, vision and mission and can facilitate the processes necessary to foster appropriate change within the individual and organization to ensure consistency with those changing issues based on information that is fact and evidenced based.
Information based Interpretation, Integration and Communication Capability	Individual and Organization as an entity effectively uses formal and informal communication efforts to express concepts, strategies, information and inspirations that affect the listener in the desired manner through its interpretation and integration of information based on information that is fact and evidenced.
Information based People Management Capability	Individual and Organization as an entity demonstrates an understanding of the people management process as it relates to diagnosing the customers' and stakeholders' needs, developing a realistic response, planning an intervention and evaluating results in a manner that yields the desired outcomes.
Information based Work Management Capability	Individual and Organization as an entity develops and maintains a workable plan and obtains resources to accomplish the overall goal of the work plans, manages and follows through to ensure the flow and timely completion of activities that deliver work results based on information that is fact and evidenced based.
Information based People Engagement Capability	Individual and Organization as an entity lets people know what they do matters, encouraging their professional growth and supervision of competencies based on information that is fact and evidenced based.
Information based Facilitation Capability	Individual and Organization as an entity uses human interaction and group processes skills to enable individual staff members, and groups or teams to resolve issues and plan initiatives with the goal of improving effectiveness and efficiency in the workplace based on information that is fact and evidenced based.

Information capital sustainability capacity set

Information Strategic thinking and Direction Capacity	Organization recognizes, explores, and uses a broad range of idea and practices for analysis and correlation between information resources trends and issues and establishment of links between information resources activities, the objective of the HEI and the needs of the customers based on the interpretation and integration of information that is fact and evidenced based emphasizing on knowledge.
Information Strategic Analysis, Metrics and Technological Expertise Capacity	Organization uses and applies technological support for information resources, evaluates new technologies and support systems, integrates technologies to support information resources activities, gathering information from measurement to develop successful customer-oriented decision making processes based on the interpretation and integration of information that is fact and evidenced based emphasizing on knowledge.
Information Training and Development Capacity	Organization provides specialized expertise including lifelong learning, learning organizations, instructional design and knowledge transfer options and knowledge management to enhance information knowledge, skills and abilities of employees based on the interpretation and integration of information that is fact and evidenced based emphasizing on knowledge.
Information Legal Regulations and Policy Management Capacity	Organization applies an understanding of key legal precedents, policies and practices to protect the information interests and utilization of the institution and individual employees based on the interpretation and integration of information that is fact and evidenced based emphasizing on knowledge.

Information Performance Management Capacity	Organization establishes how they will work together to manage their informational actions to help the organization achieve its goals by establishing metrics of performance through ongoing communications partnerships amongst a staff member, customers and team members and management of the performance metrics, analysis and synthesis based on the interpretation and integration of information that is fact and evidenced based emphasizing on knowledge.
Information Transaction Management Capacity	Organization assists and advises administrators by managing Information systems and transactions, assessing and using performance data and information based on the interpretation and integration of information that is fact and evidenced based emphasizing on knowledge.

Source: Adapted from McKinsey and Company for Venture Philanthropy Partners (2001), McKinsey Capacity Assessment Grid, Effective Capacity Building in Nonprofit Organization, 2001 and Marguerite Case Foundation Organizational Capacity Assessment Tool, Organization Capacity Assessment Tool: Introduction and Instructions, 9/1/2008, pp. 40 - 60.

3.2.4.3 Organizational Capital Capability and Capacity Set

Competencies at an institutional level are embedded at employee level; the crux lies in the capacities of the institution and its individuals to access and utilize effectively the teaching and learning resources and the processes to create value. Mentz (1997) and Turner and Crawford (1994) proposed two layers of capacity and competence required for the sustainability of the on-going processes that create and deliver educational value:

- The individual capacity of the academic and administrative staff, which is the nuts and bolts of capacity building, means the skills, knowledge, experience, personality of the individual (de Jager and Clarke, 2001) and the ability, not only to do something, but also, over a period of time, to build up a reservoir of knowledge, experience and expertise that determines present and on-going performance. This underlies the “motive, trait and skill aspect of one’s self-image or social role, or a body of knowledge which he or she uses” (Boyatzis, 1982).
- The non-individual capacity or the institution’s administrative capacity provides the context (in essence the values, beliefs and ideals) in which individual capacity is developed; this is because individuals work in an institutional setting which influences their mind-set. This constitutes, in management terminology, the institutional learning of the collective wisdom, expertise and experience of all the individuals working in the institution’s environment. This institutional capacity refers to the size, scope and scale of the performance of the total institutional system, the efficiency and rationality (i.e. the exercise of reason and judgment), and the implementation and sustainability of maintaining a certain level of output over time. It refers to the internal structures, procedures, policy frameworks and collective capabilities of the staff, as well as external environmental factors (de Jager and Clarke, 2001) and sets of behavior patterns needed to perform effectively (Woodruffe, 1992).

The institution's capacity and capability development aspects include:

- ***Skill enhancement*** – general education, on-the-job-training and professional development of cross-cutting skills such as business, analysis and interpretation, and IT (Berg, 1992). These capabilities include the intelligence, skills, knowledge and mental sets of all academic and administrative staff (Lounser, 1991). The major function of education is to increase the individual's capacity to learn through a framework of analytical and critical thinking and to increase his/her capacity to deal with new information (Bowden and Marton, 1998).
- ***Institution strengthening*** – covering the process of institutional development or institution building implying an infrastructure mentality (Berg, 1992); this could involve the values and cultural aspects of institution building (Morgan, 1993).
- ***Procedural improvements and management*** – covering on-going changes in general functions or system reform in the academic and administrative units (Berg, 1992 and Morgan, 1993). This work includes planning, designing, sequencing and mobilizing resources that affect the institution's knowledge creation and the teaching-learning-research environment (Lounser, 1991). The mechanisms used include the group interactions, knowledge management, institutional learning and change management, culture, experience and skills of the institution (Lee and Bai, 2003). It is rare that the challenge is solely either financial or institutional but is rather the degree of cultural change required; in other words, "less attention to structure, more attention to culture" (Tierney, 1999).

In "Building Capacity While Assessing It: Three Foundations' Experiences Using the McKinsey Capacity Assessment Grid", Guthrie and Preston (2005) looked at the adaptations of three grant makers of the McKinsey Grid (2001) by expounding on the reasons for its use, lessons learned from its implementation and interpretation, and recommendations for customizing the McKinsey Grid in terms of seven broad areas: Aspirations, Strategy, Organizational Skills, Human Resources, Systems and Infrastructure, Organizational Structure, and Culture. This supports the literature that highlighted the key organizational factors that were discussed and synthesized earlier. It is not surprising that these factors are applicable to the generic business organization. As such, these frameworks and variables can be used as a foundation to develop a broad set of organizational capacities that include the sufficiency and sustainability approach. Maintaining morale is an imperative as the organization's success is also human-based and the organizational entity is a setting of human strengths and deficiencies that make success or failure for an organization as a collective group (Teay, 2008). The organizational capability set was covered in the human and information capability and capacity set discussed earlier. The operationalization of the organizational capability and capacity set is shown in Table 3.5.

Table 3.5: Operationalization of the Organizational Capabilities and Capacities Set

Organizational capital sustainability capacity set	
Organization Aspirations Capacity	Organization recognizes, explores, and use a broad range of idea and practices for analysis and correlation to identify trends and issues affecting its aspirations and reasons for its existence which are clear and bold with overarching goals and objectives of the HEI and the needs of the stakeholders.
Organization Strategy Capacity	Organization has identified its overall strategy set with clear, consistent and coherent goals and performance targets that are relevant and integrated allowing growth and development.
Organization Planning and Funding Management Capacity	Organization establishes how the organization sustain its staked out position through monitoring of its landscape, strategic planning, financial planning and budgeting, operational planning, human resources planning and fundraising and revenue generation that focuses and instills <i>Individualism and Exchange, Good Interpersonal Relationships, Maintain the Social Order, Maintain Social Contract and Individual Rights, Sustain Universal Principles</i> .
Organization Performance Management Capacity	Organization establishes how the organization achieve its goals by establishing metrics of performance through ongoing communications partnerships amongst stakeholders, customers and team members and management of the performance metrics, analysis and synthesis that is fact and evidenced based leading to improvements and innovations.
Organization External Engagement and Management Capacity	Organization establishes, develops and nurtures its partnerships and alliances with the business and social communities to engage them that supports its policy and decision making affecting its legal and liability, organizational processes uses to support the external engagement.
Organization Governance Capacity	Organization has a Governing Board that is composed of internal and external members who are involved, committed and supportive of the organization with a passion and vision, an appreciation of power issues and strategic thinking that has a performance impact orientation and organizational learning centered on the people and organization effectiveness.
Organization Leadership and Management Capacity	Organization has a Leadership that is involved, committed and supportive of the organization with a passion and vision and ability to motivate and mobilize the strategic capitals and resources that has a performance impact orientation and organizational learning centered on the people and organization effectiveness through analytical and strategic thinking with sound financial management that is developmental in nature.
Organization Systems and Processes Capacity	Organization has an outlook for systemic and systematic set of operating systems and organizational processes in its planning, decision making framework, financial operations management, human resource management of its management and staff recruiting, development and retention with incentives and knowledge management that creates and adds value to the stakeholders and community.
Organization Infrastructure Capacity	Organization has an outlook for systemic and systematic set of infrastructure encompassing its physical building and space utilization and technological information communication and databases that is supportive of a conducive work environment.
Organization Structure Capacity	Organization has an organizational design that is clearly and coherently structured to bring out the best in performance and inter-functional coordination and individual job design suited to the capabilities and competence of the individual.
Organization Culture Capacity	Organization has cultivated and nurtures a culture of performance as a shared value and beliefs, shared references and practices that emphasizes on best and appropriate practices.
Organization Legal Regulations and Policy Management Capacity	Organization applies an understanding of key legal precedents, policies and practices to protect the interests and utilization of the institution and individual employees based on the interpretation and integration of the institution, national and international accepted codes of legality and conduct that is fact and evidenced based emphasizing on knowledge.

Organization Information Transaction Management Capacity	Organization has a transparent and coherent set of organization transactions that are assessed using performance and research data and information that is factual and evidenced based emphasizing on the interests of the internal and external stakeholders.
---	--

Source: Adapted from McKinsey and Company for Venture Philanthropy Partners (2001), McKinsey Capacity Assessment Grid, Effective Capacity Building in Nonprofit Organization, 2001 and Marguerite Case Foundation Organizational Capacity Assessment Tool, Organization Capacity Assessment Tool: Introduction and Instructions, 9/1/2008, pp. 40 - 60.

3.3 Capability and Capacity Assessment Tool (CCAT)

The Capability and Capacity Assessment Tool (CCAT), adapted from the SCAT by Levinger and Bloom (2010), has been developed to provide: 1) a set of criteria and procedures for assessing the human, information and organizational capability and capacity of the HEI or school; and, 2) a process through which relevant, context-specific indicators can be developed in a collaborative manner. The CCAT includes the three sets of human, information and organizational capability and capacity categories which can be further broken down, based on their operationalization, into sub-components of each of the main categories.

When assessing the capability and capacity criteria, the main rule is that all criteria should follow the same parallel structure so that a response is registered as uniformly desirable or uniformly undesirable. The same rule holds true for the scaled responses, such as: 1 = minimal, 2 = nascent, 3 = emerging, 4 = expanding, 5 = mature.

A rating scale of 1 to 5 (1 =; 2 =; 3 =; 4 =; 5 =), as shown in Table 3.6, is used in the CCAT. Scoring should be assigned to sub-components. To calculate the average scores by major category, add all the scores (elements) under each category and divide them by the number of elements. Write the results in the category box provided next to the category heading.

Table 3.6: Capability and Capacity Assessment Scoring Criteria

1 = MINIMAL	2 = NASCENT	3 = EMERGING	4 = EXPANDING	5 = MATURE
Substantial need for immediate establishment of basic capability and capacity, and urgent improvement in all areas.	Clear need for increased capability and capacity that needs basic and urgent improvement on a wide scale.	Basic level of capability capacity in place that needs significant improvement when Appropriate.	Moderate level of capacity in place that needs improvement in limited aspects; not urgent.	High level of capacity in place; current efficiency level needs maintaining.

Source: Adapted from Levinger and Bloom: A Simple Capacity Assessment Tool (SCAT) at www.gdrc.org/ngo/bl-scat.htm retrieved 18 January 2010.

3.3.1 Procedures of the Capability and Capacity Assessment

The HEI or school should consider the following points, as recommended and reproduced here from Levinger and Bloom (2010) who used the assessment tool shown in Table 3.7 to assess the existing status of their capability and capacity:

1. **Purpose of Evaluation:** Identify the purpose(s) particular to this assessment.
2. **Team Composition:** Select an assessment team to include people who know the HEI or school and who will be in a position to carry out some of the recommendations that result from the assessment. Also, select people who are external to the HEI or school and can bring objectivity and an independent perspective to the situation. One member of the team should have some expertise in management and organizational development. It may be useful to include as many people on the team as the management deems necessary, either because of their knowledge of the HEI or school, or because of their need to be educated about its strengths and weaknesses. A representative mix of management functions or divisions of the HEI or school should be included, as well as representatives of the membership or constituency served by the HEI or school.
3. **Identify Information Sources:** Identify internal and external information sources and schedule individual interviews, group meetings and data collection sessions to gather information. Determine who on the assessment team will interview the information sources and who will be responsible for collecting data. Meeting with small groups of constituents, members and staff representatives in focus or discussion groups (where a small group of respondents is guided by a facilitator into responding to questions at increasing levels of focus and depth) is an efficient way of gathering valuable information.
4. **Interviews:** Conduct interviews, meetings and data collection sessions according to a schedule that has been submitted to respondents in advance. Each interview session should commence with an explanation about the purposes of the assessment and the uses that will be made of the information. Specifically emphasize when the information source(s) will receive assessment results and explain their involvement in the utilization of the information. Information should be gathered and recommendations presented in a way that emphasizes that the HEI or school being assessed is not being judged against an absolute set of standards as the only form the HEI or school can take. Rather, it is important to remind respondents that the functions and factors being offered for comparative purposes are suggestions about *possible* ways of doing things that are derived from extensive experience in managing the HEI or school in a multiplicity of environments.
5. **Consensus Scoring:** After each assessor in the team has given his/her individual scoring based on the assessment criteria, the team leader should get the team to come to a consensus of an overall score that reflects the perspectives of all the individual assessors.

Consensus is a unanimous agreement rather than averaging out the scores of the individuals. It should be based on the facts and evidence supporting the assessment.

6. **Developing Recommendations:** The assessment team should be prepared to develop recommendations on how the HEI or school can best address the issues identified in the assessment and how to build upon the highlighted strengths.
7. **Transparency:** Recommendations should be discussed with the management and front-line workers of the HEI or school, not just those members who have participated in the assessment.

Note:

1. Table 3.7 is a simplified assessment tool that is used for the scoring of the overall Human Capacity and Capability, Information Capacity and Capability, and the Organizational Capacity and Capability.
2. The scoring factors of 1 (minimal) to 5 (mature), as shown in Table 3.6, is used by each of the assessors to assess points individually, and then come to an overall consensus when they meet to collate, consolidate and reconcile differences.
3. Each part of the capacity and capability group is identified, and then summated to arrive at the overall assessment of the organization's capacity and capability profile to determine both its strengths and opportunities for improvements.
4. It is important that these are approached realistically and holistically in order to determine the real "strengths" and "weaknesses".

Table 3.7: Overall Organizational Capability and Capacity Assessment

Human, Information and Organizational Capability and Capacity Assessment Tool	
Name of HEI or School: _____	
1 st Assessor:	Conducted by:
2 nd Assessor:	Conducted by:
3 rd Assessor:	Conducted by:
4 th Assessor:	Conducted by:
Scoring: 1= Minimal; 2 = Nascent; 3 = Emerging; 4 = Expanding; 5 = Mature	

Developing and Actioning Strategic Planning in HEI

	1 st Assessor	2 nd Assessor	3 rd Assessor	4 th Assessor	Overall Consensus
Human Capital Capability					
Strategic Planning Capability					
Customer Orientation Capability					
Leadership Capability					
Ethics and Integrity Capability					
Achievement Orientation Capability					
Relationship-building, Collaboration and Partnership Capability					
Self-awareness and Professional Development Capability					
Change Management and Organization Design Capability					
Communication Capability					
People Management Capability					
Work Management Capability					
People Engagement Capability					
Facilitation Capability					
Human Capital Capacity					
Strategic Thinking and HR Direction Capacity					
Strategic Analysis, Metrics and Technological Expertise Capacity					
Strategic Staffing Capacity					
Training and Development Capacity					
Total Rewards/Compensation and Recognition Capacity					
Benefits Management Capacity					
Legal Regulations and Policy Management Capacity					
Complaints, Conflict and Dispute Management Capacity					
Performance Management Capacity					
Transaction Management Capacity					
Overall for Human Capability					
Overall for Human Capacity					
Overall for Human Capability and Capacity					
Information Capital Capability					
Strategic Information Planning Capability					
Information-based Customer Orientation Capability					
Information Leadership Capability					
Information Ethics and Integrity Capability					
Information Achievement Orientation Capability					
Information Relationship-building, Collaboration and Partnership Capability					
Information based Self-awareness and Professional Development Capability					

Developing and Actioning Strategic Planning in HEI

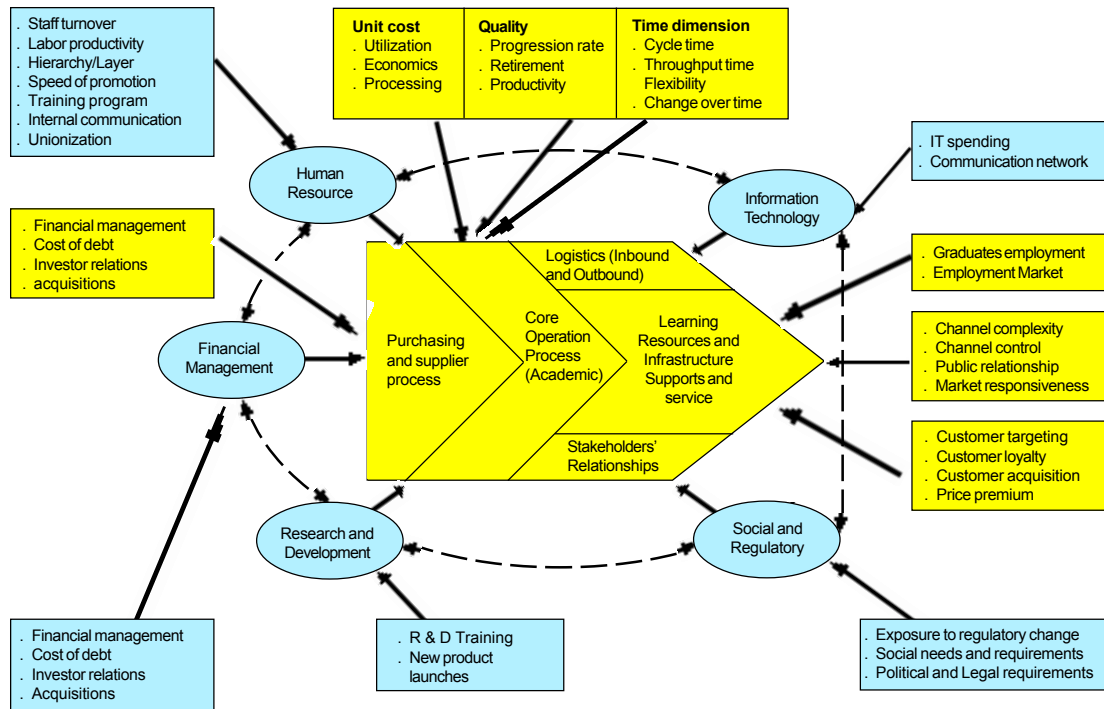
	1 st Assessor	2 nd Assessor	3 rd Assessor	4 th Assessor	Overall Consensus
Information-based Change Management and Organization Design Capability					
Information-based Interpretation, Integration and Communication Capability					
Information-based People Management Capability					
Information-based Work Management Capability					
Information-based People Engagement Capability					
Information-based Facilitation Capability					
Information Capital Capacity					
Information Strategic Thinking and Direction Capacity					
Information Strategic Analysis, Metrics and Technological Expertise Capacity					
Information Training and Development Capacity					
Information Legal Regulations and Policy Management Capacity					
Information Performance Management Capacity					
Information Transaction Management Capacity					
Overall for Information Capability					
Overall for Information Capacity					
Overall for Information Capability and Capacity					
Organizational Capital Capacity					
Organization Aspirations Capacity					
Organization Strategy Capacity					
Organization Planning and Funding Management Capacity					
Organization Performance Management Capacity					
Organization External Engagement and Management Capacity					
Organization Governance Capacity					
Organization Leadership and Management Capacity					
Organization Systems and Processes Capacity					
Organization Infrastructure Capacity					
Organization Structure Capacity					
Organization Culture Capacity					
Organization Legal Regulations and Policy Management Capacity					

	1 st Assessor	2 nd Assessor	3 rd Assessor	4 th Assessor	Overall Consensus
Organization Information Transaction Management Capacity					
Overall for Organization Capacity					
Overall Summative Capability and Capacity Assessment					
Overall for Human Capability					
Overall for Human Capacity					
Overall for Human Capability and Capacity					
Overall for Information Capability					
Overall for Information Capacity					
Overall for Information Capability and Capacity					
Overall for Organization Capacity					
Overall Capability and Capacity					

Source: Adapted from Teay (2009): Institution and Individual Sufficiency and Sustainability of the Future HEI, *The Future of Higher Education*, Proceedings of 9th Annual SEAAIR (South East Asia Association for Institutional Research, 13th-15th October 2009, Penang, Malaysia and Levinger, B and Bloom, E., (2010), A Simple Capacity Assessment Tool (SCAT) at www.gdrc.org/ngo/bl-scat.htm retrieved 18 January 2010.

3.4 Value Chain: Analytical Framework of a HEI or School

Figure 3.2: Value Chain of a HEI or School



Source: Adapted from Porter (1985): Competitive Analysis of a Firm, as adapted in Tray (2008), "A Primer on Strategic Organization Analysis and Planning Model", 4th Edition 2007, AU Digital Press, Bangkok, 2007.

The Value Chain (Figure 3.2), as first proposed by Porter (1979), has undergone various adaptations and revisions to fit the situational requirements (Pil and Holweg, 2006) of determining the primary and support activities of an organization. As adapted in this book, the HEI or school also has a set of primary activities which contribute directly to the main purposes (the teaching-learning-research and community services) of the HEI or school; these are the primary activities noted in Figure 3.2.

There is a basic input from the external environment in terms of the students, the suppliers of the learning resources and facilities, the suppliers of the teaching profession, and the financial shareholders or suppliers. Once they enter the HEI or school system, the management of the teaching/learning processes begins through the transformation of the students. This occurs by way of the development of their knowledge, skills and abilities by the faculty, together with the support and services provided by the administrative functions. These service and support functions cover all the learning resources, facilities and equipment and infrastructure; they also include the support activities of the human resources, the development and retention of the human capital assets, and the Information Technology which is set up and deployed to support all the TLR (Teaching-Learning-Research), the core function of the institution. The core TLR must be designed and developed within social and regulatory requirements. Once the students have completed the four/five-year programs, they then need to “sell themselves” to the employment market and contribute to social and community development.

The first question posed to the Value Chain is to identify what and how value is added by each activity to the overall value of the educational product (Day and Liam, 1990; Elkington, Emerson and Beloe, 2006). If a certain activity does not add value, the analysis should determine the reason why. There are two main questions concerning what the components are of this value which is added to the final education product by way of a certain activity. The second question should address how this addition of value is to be determined. In answering the first question, it is necessary to return the basic question of why the students would buy the institution’s education product in the first place. In short, there must be a need, and the received value should meet the basic expectations of this need. The need is satisfied when the student perceives that value has been added to his/her consumption of an educational product as compared to the competing products on offer. This means that the HEI or school needs to determine this value based on: ***CV (Customer Value) = f (Product Quality, Service Quality, Image, Relationship)/Cost***. The details of this concept of Customer Value are discussed in the section on customer needs analysis and competitor analysis.

It suffices here to say that, ultimately, customer value, attained through the consumption of the education product, delivered by way of the internal primary and support activities of the HEI or school. This leads to the next question, which is to determine how value is added or destroyed through a specific activity. This analysis should be carried out for all the activities identified in the value chain above. The “gap analysis” mechanism is a simple but powerful methodology that can be used to determine whether value has been added or destroyed.

In the gap analysis, the following steps can be used as a guide:

1. ***“What it should be” (E) analysis:*** First determine the “what it should be” or the expectation of the activity in terms of its contribution to the overall value of the educational product, as noted above.
2. ***“What it is” (A) analysis:*** Then determine the “what it is” or the actual result of the performance of the activity.
3. ***Difference between the “what it should be” (E) and “what it is” (A)*** – Compare the actual result, the “what it is” (A), and the expected result, the “what it should be” (E); the resulting difference shows whether value has been added or destroyed. A positive result shows that value has been added, and a negative result shows that value has been destroyed.

A gap analysis of the value addition should also be performed as the basis for further improvements in order both to address deficiencies and to examine what can be done better from positive results. These innovations form the basis of the overall competency of the HEI or school, which is an internal source of competitive advantage unique to the HEI or school and not easily duplicated by others. The sources of these internal capabilities and capacities form the differential edge which the HEI or school can use to compete with others; these are the foundation of success. The greater the levels of capability or capacity, the higher the competency of the institution and the better it will be compared to others, giving it a competitive advantage.

An example of a gap analysis is shown below in Table 3.8; it illustrates those factors that constitute the outcomes expected of the student in the core activities of teaching and learning: i.e. the teaching and learning outcomes the student-centered learning process should have achieved as defined in this competency. The expected and actual outcomes are both determined in order to identify the gap. Actions then need to be taken to close any identified gaps in order that the activities add value to the final education product that is offered.

Table 3.8: Gap Analysis of the Student Competency Set: Effectiveness Index

Competency Factor		Operational Elements of each of the Factors	Expected level of Proficiency (E)	Actual level of Proficiency (A)	Gap (A) - (E)
SCEI1	Students have the knowledge	Discipline Knowledge – Students will possess detailed and comprehensive knowledge of the subject or program of study.	1 2 3 4 5	1 2 3 4 5	
SCEI2	Students have the professional ethics and values	Ethical Attitude – Students will possess a sense of community and professional responsibility and will be able to identify and offer appropriate solutions to ethical dilemmas.	1 2 3 4 5	1 2 3 4 5	
SCEI3	Students have the critical and analytical skills	Problem Solving and Reasoning – Students will possess critical thinking and problem solving skills, which enable effective analysis, evaluation and creative resolution of legal problems.	1 2 3 4 5	1 2 3 4 5	
SCEI4	Students are information literate	Information Literacy – Students will be able to use current technologies and effective strategies for the retrieval, evaluation and creative use of relevant information as a lifelong learner.	1 2 3 4 5	1 2 3 4 5	
SCEI5	Students have the cognitive skills	Cognitive skills – Students will be able to critically evaluate, reflect and communicate and professionally consider options for an appropriate course of action, Analytical and Critical Reasoning.	1 2 3 4 5	1 2 3 4 5	
SCEI6	Students have interpersonal skills	Interpersonal Focus – Students will be able to work both independently and as a productive member of a team, practice critical reflection and creative thinking, be socially responsible and inclusive, and be able to work effectively and sensitively within the global community in continually changing environments.	1 2 3 4 5	1 2 3 4 5	
SCEI7	Students can communicate	Communication – Students will be able to clearly, appropriately and accurately communicate both orally and in writing having regard to the appropriate language for a variety of contexts.	1 2 3 4 5	1 2 3 4 5	
SCEI8	Knowledge Conditioning	Morality in prudence and care in interpretation, integration and the application of knowledge.	1 2 3 4 5	1 2 3 4 5	
SCEI9	Morality Conditioning	Morality in terms of honesty, integrity, sincerity, perseverance, diligence, sharing.	1 2 3 4 5	1 2 3 4 5	

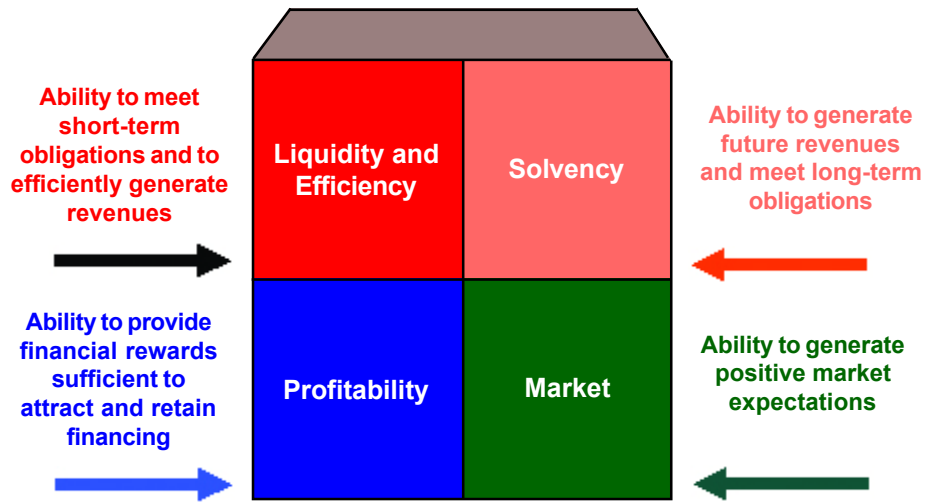
Source: Adapted from Teay (2008): "Sufficiency and Sustainability: Individual Capacity Building for HE" scholarly paper presented at the 48th Annual 2008 Association for Institutional Research Forum, Seattle, Washington, 24th May - 29th May, 2008; Teay (2005): AuQS 2000 QMIPS Curriculum Quality Management System, 1st Edition, 2005, and Teay (2006): "Quality Assurance: Teaching Competency and Effectiveness Index", Proceedings of UPAL Conference, November 2006, Bangkok.

3.5 Financial Analysis

A key component of the analysis of the internal environment is to determine the financial position and performance of the HEI or school. A key major constraint for most public or private HEIs or schools is the financial sustainability of the institution itself. A major problem is that there are always a great many projects and plans chasing very limited financial resources. Thus, to achieve longer term survival and sustainability, any HEI or school must ensure it fully understands the management of its financial resources in terms of both its position and performance.

The building blocks of financial analysis cover the four main areas shown in Figure 3.3. These are self-explanatory and are as follows:

Figure 3.3: Building blocks of financial analysis



To identify the financial standing and performance of the HEI or school, a Financial Performance and Position Analysis (FPPA) should address the following questions:

- i. What are the current financial objectives, strategies, policies and programs of the HEI or school?
 - Are they clearly stated or merely implied?
 - Are they consistent with the mission, objectives, strategies and policies, and with the internal and external environments of the HEI or school?
- ii. How well is the HEI or school performing in terms of financial analysis?
 - What trends have emerged from this analysis?
 - Are there any significant differences when statements are calculated in constant versus reported dollars?
 - What impact have these trends had on past performance and how are they likely to affect future performance?
 - Does this analysis support the past and pending strategic decisions of the HEI or school?
 - Does finance provide the HEI or school with a competitive advantage?
- iii. How well does the financial performance of this HEI or school compare with that of similar institutions?
- iv. Are financial managers using accepted financial concepts and techniques to evaluate and improve the current performance of the HEI, school, departments, programs and divisions? (Consider financial leverage, capital budgeting, ratio analysis, and managing foreign exposure, if applicable.)

- v. What is the role of the financial manager in the strategic management of the HEI or school?
- vi. Has an assessment been made of the exposure to the overall risks that could be the result of natural causes or exposure to uncertainties in the external operating environment?
- vii. Is there a systematic approach to the sourcing, acquisition, deployment and assessment of those projects that need financial resources or support to determine their feasibility?

3.6 Summary of Internal Environment Factor Analysis (SIEFA)

As discussed earlier, the main objective of the Internal Environment Analysis is to determine and analyze what factors have an impact on the internal operating environment of the HEI or school that are critical to its achievements. This book introduced three main models that can be used to identify, analyze and determine the internal factors that affect the HEI or school. These are:

1. Human, Information and Organizational Capability and Capacity Assessment Framework and Tool (CCAT),
2. Value Chain Analytical Framework,
3. Financial Analysis.

It should be noted at this point that there are many other models that exist in other strategic management books that can be used to determine the performance of the internal factors affecting the operations of an HEI or school. One of such approach is the Resources Audit Framework whereby key questions are used to determine the performance of these resources. These are attached in Appendix 3.1.

It should also be noted that, regardless of the models, frameworks or approaches used, the main outcome is a set of internal factors that have an impact on the operation and overall performance of the HEI or school due to their management. The key lies in determining the strategic or main factors that have a significant or even critical impact on the overall performance of the HEI or school. Rather than arriving at a set of heuristic or subjective factors, an objective approach is favored in this book based on two dimensions: their degree of importance and how well the HEI or school is addressing these factors. These dimensions are outlined below:

- **Degree of impact:** This is represented by the “weight”. Thus, the more relevant the factor (i.e. one that has a greater impact on the future well-being and operation of the institution’s staked out position), the more “weight” the factor will be assigned.
- **Rating of how well the HEI or school is addressing this factor:** For each of the factors, it needs to be determined how well the HEI or school is responding to it. The better the factor is being addressed, based on its capabilities or capacities, the higher the rating from a scale of 1 (very poor) to 5 (outstanding).

This set of proxy objectives support judgmental decisions as they are based on the weighted score of each of the factors, as shown in Table 3.9. Those factors with the highest weighted scores are deemed to be more critical in affecting the overall performance of the HEI or school based on its capabilities and capacities or through adding value addition to its primary and supporting activities in terms of the products and services it offers.

Based on the two dimensions above, the “weight” is then multiplied by the “rating” to achieve a weighted score that can be used to rank factors from the most relevant or critical to the least important. Only the top five to eight factors should be selected for the SIEFA table. This is a systematic approach to identify the key “strengths” and “weaknesses” facing the HEI or school and is different from the diverse and varied internal analysis that was carried out earlier using the three models.

Table 3.9: Summary of Internal Environment Factors' Analysis (SIEFA)

Internal Factors	Weight	Rating	Weighted Score	Comments
1	2	3	4	5
Strengths				
Weaknesses				
Total Weighted Score	<u>1.00</u>		<u> </u> <u> </u>	

Notes: 1. List strengths and weaknesses (5-10 each) in Column 1. 2. Weight each factor from 1.0 (Most important) to 0.0 (Not Important) in Column 2 based on that factor's probable impact on the company's strategic position. The total weight must sum to 1.00. 3. Rate each factor from 5 (Outstanding) to 1 (poor) in Column 3 based on the company's response to that factor. 4. Multiple each factor weight times its rating to obtain each factor's weighted score in Column 4. 5. Use Column 5 (comments) for rationale used for each factor. 6. Add the weighted scores to obtain the total weighted score for company in Column 4. This tells how well the company is responding to the strategic factors in its internal environment.

Source: Adapted from T.L. Wheelen and J.D.Huger, “Internal Strategic Factor Analysis Summary (IFAS)”, Copyright © 1991 by Wheelen Huger Associates. Reprinted by permission.

Using the SIEFA approach arrives at a set of strategic internal factors that will contribute to the overall strategic SWOT summary that is discussed in Chapter 4. The key outcome is a set of strategic key capabilities and capacities that represent the key strengths and weaknesses of the HEI or school; this is not dependent on a set of many, generalized factors that might not represent the “real” strengths and weaknesses of the institution.

Summary

To conclude, this chapter has highlighted the internal environment analysis approach using the “capabilities and position” perspectives of the book. In essence, the capabilities and capacities, which are internal to the HEI or school, are the strengths and weaknesses of the internal operating system of the institution that affects its overall performance and position in the education industry.

In determining the SW (Strengths and Weaknesses) of the HEI or school, based on the “capabilities and position” perspectives of this book, three main models or frameworks were reviewed to determine internal strengths and weaknesses. The three models were as follows:

1. Human, Information and Organization Capability and Capacity Assessment Framework and Tool (CCAT),
2. Value Chain Analytical Framework,
3. Financial Analysis.

Based on the use of these three models, the HEI or school will have derived a set of internal factors that reflect those internal strengths and weaknesses that have an impact on their internal operation and performance. As there are many factors, the institution should come up with a set of internal factors, or Strengths and Weaknesses, that are strategically critical to their overall performance and achievement. This is the resulting Summary of Internal Environment Factors Analysis (SIEFA).

References

1. Amidon, D.M., (1997), *Innovation Strategy for the Knowledge Economy: The Ken Awakening*, Butterworth-Heinemann, Boston, MA.
2. Anand, V., Manz, C. and Glick, H. (1998), An organizational memory approach to information management, *Academy of Management Review*, Volume 23 Number 4.
3. Andriessen, D. (2001), *Weightless wealth*, Paper for the 4th world congress on the management of intellectual capital, Mc Master University, January 17 - 19, Hamilton, Ontario.
4. Barabba, V.P and Zaltman, G. (1991), *Hearing the Voice of the Market: Competitive Advantage through creative use of Market Information*, Harvard Business School Press, 1991.
5. Beardsley S.C., Johnson, B.C. and Manyika, J.M. (2006), Competitive advantage from better interactions, *The McKinsey Quarterly*, 2006, Number 2. pp 53 - 63.
6. Berg, E. (1993), *Rethinking technical cooperation: reforms for capacity building in Africa*. Washington, D.C.: UNDP/DAL.
7. Blackler, F. (1995), Knowledge, knowledge work and organizations: an overview and interpretation, *Organization studies*, 16(6). Pp 69 - 75 .

8. owden, J. and Marton, F. (1998), *The University of Learning - beyond quality and Competence in Higher Education*, Kogan Page, London, pp. 95.
9. Boyatzis, R., (1982), *The Competent Manager*, New York, Wiley.
10. CADRI (Capacity for Disaster Reduction Initiative) downloaded from <http://www.unisdr.org/cadri/>
11. Chatzkel, J. (2002), Conversation with Alex Bennet, former deputy CIO for enterprise integration at the U.S. Dept. of Navy, *Journal of Knowledge Management* 6(5), pp 434 - 444.
12. Chung, E., and McLarney, C. (1999), When giants collide: strategic analysis and applications, *Management Decision*, 37/3 pp. 233 - 247.
13. Cohen, J.M. (1993b), Building sustainable public sector managerial, professional and technical capacity: A framework for analysis and intervention, Development Discussion Paper 473. Cambridge. MA: Harvard Institute for International Development.
14. Davenport, T.H. and Prusak, L. (1998), *Working Knowledge, How Organizations Manage What They Know*, Harvard Business School Press, Boston, MA.
15. Day and Liam (1990), Putting Strategy into Shareholder Value Analysis, *Harvard Business Review*, March - April 1990 pp. 1 - 8.
16. De Jager, Arjan and Clarke, Denise (2001), Building Local and Sustainable Capacities for ICT Development, *Approaches to ICT Development*, Issue 10, July 2001, ECDPM, pp. 2 - 3.
17. Dougherty, Vicky (1999), Knowledge is about people, not databases, *Industrial and Commercial Training*, Volume 31 Number 7, 1999, pp 262 - 266 .
18. Elkington, J., Emerson, J. and Beloe, S. (2006), The Value Palette: A tool for full spectrum strategy, *California Management Review*, Winter 2006, Vol. 49. No. 2 pp. 5 - 28.
19. Fish, D. (1992), Reflection on Theory and Practice - a holistic approach to professional education, in Bond, C. (Ed), *Proceedings - Education and the competent practitioner - The Pre-Registration Experience*, British Dietetic Association and Ross Laboratories.
20. Fowler, A. and Pryke, J. (2003), Knowledge management in public service provision: the child support agency, *International Journal of Service Industry Management*, 14(3), 254 - 283.
21. Gale, Bradley T. (1994), *Managing Customer Value: Creating Quality and Service that Customer Can See*, New York: The Free Press, Simon & Schuster, 1994, pp. 22.
22. Garrett-Owens, S., Gurgevich, P., Katz, J., Mulay, B., Nystrom, D., and Williams, E. (2003), Human Resources Competency Model for Human Resources Professional at the University of Michigan 2003, UM-HR Academy, 2003.
23. Green, P.C. (1999), *Building Robust Competencies: Linking Human Resources Systems to Organizational Strategies*, Jossey-Bass, 1999.
24. Guthrie, K. and Preston, A. (2005), Building Capacity While Assessing It: Three Foundations' Experiences Using the McKinsey Capacity Assessment Grid in *A Funder's Guide to Organizational Assessment*, Wilder Publishing Center, 005.
25. Haeckel, S.H. (1987), *Presentation to the Information Planning Steering Group*, Marketing Science Institute, Oct. 1987, Cambridge, MA, 1987.

26. Hamermesh, R.C., Marshall, P.W., and Pirmohamed, T. (2002), Notes on Business Model Analysis for the Entrepreneur, Harvard Business Review, January 2002 pp. 1 - 14.
27. Hendriks, P.H.J. and Vriens, D.J. (1999), Knowledge-based systems and knowledge management: friends or foes?, *Information and Management*, 35(2), 113 - 125.
28. Hiderbrand, M.E. and Grinde, M.S. (1994), Building sustainable capacity: challenges for the Public Sector: Cambridge. MA: Harvard Institute for International Development/UNDP.
29. Hildreth, P., Wright, P. and Kimble, C. (1999), Knowledge Management: are we missing something? *Information Systems - The Next Generation*, Brooks, L. and Kimble, C., eds. Pp 347 - 356.
30. Houtzagers, G. (1999), Empowerment, using skills and competence management, *Participation and Empowerment: An International journal* Volume 7 No. 2, pp. 27 - 32.
31. Kane, H., Ragsdell, G. and Oppenheim, C. (2006) Knowledge Management Methodologies, *The Electronic Journal of Knowledge Management*, Volume 4 Issue 2, pp. 141 - 152.
32. Kaplan, Robert S. and Norton, David P. (1996), *Translating Strategy into Action: The Balanced Scorecard*, HBS Press 1996.
33. Kaplan, Robert S. and Norton, David P. (2001), *The Strategy Focused Organization*, HBS Press 2001.
34. Kaplan, Robert S. and Norton, David P. (2004), Strategy Maps: Converting Intangible Assets into Tangible Outcomes, Harvard Business School Press, 2004.
35. Kaplan, Robert S. and Norton, David P. (2006), Alignment: Creating corporate Synergies, Harvard Business School Press, 2006.
36. Kulkarni, U. and Louis, R.S. (2003), Organizational Self-Assessment of Knowledge Management Maturity, 9th American Conference on Information Systems, 2003, pp. 2542 - 2551.
37. Kulkarni, U and Freeze, R. (2002), Measuring Knowledge Capabilities.
38. Lederer, L.A. and Gardiner, V. (1992), The process of strategic information planning' *Journal of Strategic Information Systems*, Vol. 1 No. 2, March 1992, pp. 76 - 83 .
39. Lederer, L.A. and Salmena, H. (1996), Toward a theory of strategic information system planning, *Journal of Strategic Information Systems*, Vol. 5, Issue 2, pp. 237 - 253.
40. Lee, G and Bai, R. (2003), Organizational mechanisms for successful IT strategic planning in the digital era, *Management Decision* 41/1, (2003), pp. 32 - 42.
41. Lee, S.M. and Hong, S. (2002), An enterprise-wide knowledge management system Infrastructure, *Industrial Management and Data Systems*, 102/1 (2002), pp. 17 - 25.
42. Levinger, B. and Bloom, E. (2010), A Simple Capacity Assessment Tool (SCAT) at www.gdrc.org/ngo/bl-scat.htm retrieved 18 January 2010
43. Lounser, D.K. (1991), *Capacity development - A conceptual overview*. Paper presented at a workshop on Capacity Development at the Institute of Governance, Ottawa, Canada.
44. Mahesh, K. and Suresh, J.K. (2004), What is the K in KM Technology?, *The Electronic Journal of Knowledge Management*, Volume 2 Issue 2, pp. 11 - 22.
45. Marguerite Case Foundation Organizational Capacity Assessment Tool, Organization

- Capacity Assessment Tool: Introduction and Instructions, 9/1/2008, pp. 40 - 60.
46. McKinsey and Company for Venture Philanthropy Partners (2001), McKinsey Capacity Assessment Grid, Effective Capacity Building in Nonprofit Organization, 2001.
 47. Mentz, J.C.N. (1997), *Personal and Institutional Factors in Capacity Building and Institutional Development*, ECDPM Working Paper No. 14, Maastricht: ECDPM.
 48. Morgan, P. (1993), *Capacity development: An Overview Paper presented at a workshop on Capacity Development at the Institute of Governance*, Ottawa, Canada.
 49. Namasivayam, K. and Denizci, B. (2006), Human Capital in service organizations: identifying value drivers, *Journal of Intellectual Capital*, Vol. 7. No. 3 pp. 381 - 393.
 50. Pil, F.K. and Holweg, M. (2006), Evolving from Value Chain to Value Grid, *MIT Sloan Management Review*, Summer 2006, Vol. 47 No. 4 pp. 71 - 80 .
 51. Porter, M. E. (1979), *How Competitive Forces Shape Strategy*, (March- April). Copyright? 1979 by the President and Fellows of Harvard College; all rights reserved.
 52. Porter, M. E. (1998), *Competitive strategy techniques for analyzing industries and competitors: With a new introduction*, Developing and Actioning Strategic Planning in HEI, New York. Macmillan 396 p.
 53. Prahalad, C.K. and Hamel, G. (1990), The Core Competence of the Corporation, *Harvard Business Review*, May - June 1990, Vol. 68 No.3, pp.79 - 92.
 54. Pramongkit, Prasopchoke, and Teay, Shawyun (2002), Strategic IT Framework for Modern Enterprise by using Information Technology Capabilities, *Proceedings of 2002 IEEE International Engineering Management Conference (IEMC - 2002)*, Cambridge UK.
 55. Sanchez, R., Heene, A., Thomas, H. (1996), Introduction: towards the theory and practice of competence-based competition, in Sanchez, R., Heene, A., Thomas, H. (Eds), *Dynamics of Competence-based Competition: Theory and Practice in the New Strategic Management*, Elsevier Science, Oxford, pp.1 - 35.
 56. Sanchez, J.I. (2000), The Art and Science of Competency Models: Pinpointing Critical Success Factors in Organizations, *Personnel Psychology*, Summer 2000, Durham.
 57. Shupe, C. and Behling, R. (2006), Developing and Implementing a Strategy for Technology Deployment, *The Information Management Journal*, Vol. 40, No. 4, July and August 2006.
 58. Sun Tzu translated by Lionel Giles (2005). *The Art of War by Sun Tzu - Special Edition*. El Paso Norte Press. ISBN 0-9760726-9-6.
 59. Sun Tzu translated by Chow-Hou WEE (2003), *Sun Zi Art of War: An Illustrated Translation with Asian Perspectives and Insights*. Pearson Education Asia Pte Ltd. ISBN 0-13-100137-X.
 60. Sun Tzu translated by R. L. Wing (1998), *The Art of Strategy*. Seattle, Washington: Main Street Books. 1988-05. ISBN 0-385-23784-7.
 61. Teay, S. (2005), AuQS 2000 QMIPS Curriculum Quality Management System, 1st Edition, 2005.
 62. Teay S. (2006), "Quality Assurance: Teaching Competency and Effectiveness Index", *Proceedings of UPAL Conference*, November 2006, Bangkok.
 63. Teay, S. (2007), HE through the Sufficiency and Sustainability Lens, *Proceedings of 7th*

- Annual SEAAIR Conference, Bangkok in “Sufficiency and Sustainability in Higher Education: An Agenda”, September 2007, pp. 456 - 468.
64. Teay, S. (2007), *A Primer on Strategic Organization Analysis and Planning Model*, 4th Edition 2007, Assumption University Digital Press, Thailand.
65. Teay, S. (2007), Higher Education through the Sufficiency and Sustainability lens, Proceedings of the 7th SEAAIR Conference, September 2007, Bangkok, Thailand.
66. Teay, S. (2008), Sufficiency and Sustainability: Individual Capacity Building for HE, scholarly paper presented at the 48th Annual Association For Institutional Research, Seattle, U.S. 26th - 28th May, 2008.
67. Teay, S. (2008), Sufficiency and Sustainability: Institutional Capacity Building for HEI, Proceedings of 8th SEAAIR 2008 Conference, Surabaya, Indonesia, Nov 2008.
68. Teay, S. (2008), Strategic Market Driven IS/IT Planning Model. In A.W.K. Tan and P. Theodorou (Ed). *Strategic Information Technology and Portfolio Management*. Hershey, December 2008, P.A. Information Science Reference, pp. 39 - 48.
69. Teay, S. (2008), Strategic Capital Capacity and Capability Management of IS/IT. In A.W.K. Tan and P. Theodorou (Ed). *Strategic Information Technology and Portfolio Management*. Hershey, December 2008, P.A. Information Science Reference, pp. 230 - 249.
70. Teay, Shawyun (2009), Institution and Individual Sufficiency and Sustainability of the future HEI, *The Future of Higher Education*, Proceedings of 9th Annual SEAAIR (South East Asia Association for Institutional Research, 13th - 15th October 2009, Penang, Malaysia.
71. Tierney, W.G. (1998), *Responsive University: Restructuring for High Performance*, John Hopkins University Press, Baltimore, MD, pp. 152 - 153.
72. Thorton, G.C. and Byham, W.C. (1982), *Assessment centers and managerial performance*. New York; Academic Press.
73. Turner, D. and Crawford, M. (1994), Managing current and future competitive performers: The role of competency. In G. Hamel and A. Heene (Eds.), *Competency-based competition: Strategic Management series* (pp. 241 - 254), Chichester, England, Wiley.
74. UNCED (1992), Capacity Building - Agenda 21's definition (Chapter 37, UNCED, 1992).
75. UNDP (1991), Symposium on “A Strategy for Water Sector Capacity Building” Deft, The Netherlands in 1991.
76. Von Krogh, G., Roos, J. and Slocum, K. (1996), “An Essay on corporate epistemology” in von Krogh, G. and Roos, J. (Eds), *Managing Knowledge: Perspectives on Cooperation and Competition*, Sage Publication, London.
77. Woodruffe, C. (1992), What is meant by competency? In R. Boam and P. Sparrow (Eds.).
78. Wheelen, T.L and Hunger, J.D. (1992), *Strategic management and business policy*, Addison-Wesley, 1992 and 2007.

Guidelines for the use of Appendix 3.1

1. The SWOT guidelines here are divided based on the Resource Audit Framework widely used in any identification of the strengths and the weakness of the existing resources and potential capabilities; these constitute the organization's internal capabilities or the lack of certain key capabilities.
2. A set of questions comprehensively examines the overall management of these resources. A gap analysis is preferably used to identify the “what is” and “what should be” in order to come up with a set of positive or negative factors in terms of the resource management.
3. Consciously and conscientiously determining the facts and the indicators of achievements of the questions helps in identifying a healthy or “real” set of capabilities.

Appendix 3.1

A. Guidelines and Checklist for developing a SWOT

Some guidelines are offered here to help identify the SWOT. (Note that these are adapted from the corporate version but they can still be used as managing a HEI, school or program is similar to managing a corporation.)

Source: Adapted from Wheelen, T.L and Hunger, J.D. (1992), Strategic management and business policy, Addison-Wesley, 1992 and 2007; and Teay, S. (2007), A Primer on Strategic Organization Analysis and Planning Model, 4th Edition 2007, Assumption University Digital Press, Thailand.

I. External Environment Analysis (EEA): Opportunities and Threats from the SWOT

A. Societal Environment Analysis (SEA)

- What macro and general environmental forces or drivers are currently affecting both the institution and the industries in which it competes? Which forces, drivers or factors present current or future opportunities or threats?
- What impact and/or implications do these forces, drivers or factors have on the HEI or school?

The key macro factors of importance are (BPEST model):

- i. Business factors
- ii. Political-legal factors
- iii. Economic factors
- iv. Socio-cultural factors
- v. Technological factors

Are these forces different in other industries or in other regions of the world?

B. Task Environment Analysis (TEA)

- What forces drive competition in the industry? Are these forces the same globally or do they vary from country to country?

For example:

- i. Threat of new entrant,
 - ii. Bargaining power of buyers,
 - iii. Threat of substitute products or services,
 - iv. Bargaining power of suppliers,
 - v. Rivalry among competing HEIs or schools,
 - vi. Relative power of stakeholders such as students, the employment market, alumni, parents, governments, special interest groups.
- What key factors in the immediate environment (that is, customers, competitors, suppliers, governments, trade associations, interest groups, local communities, and stakeholders) are currently affecting the HEI or school?
 - Which are current or future opportunities or threats?
 - How do they affect the HEI or school or represent opportunities or threats to the institution?

C. External Environment Factors Analysis Summary (EEFAS)

- The summary is based on the SEA and TEA in (A) and (B) respectively in order to arrive at an overall and comprehensive set of opportunities or threats that influences the present and/or future direction of the HEI or school.
- The summary and comprehensive EEA should determine those factors that have a high probability of occurring and that are likely to have a high degree of:
 - Impact on the HEI or school
 - Implications for the HEI or school.
- Which of these forces and factors are the most important to the HEI or school and to the industries in which it competes at the present time? Which will be important in the future?

II. Corporate Governance Analysis (CGA)

A. Top Management Analysis (TMA)

- What person or group constitutes top management?
- What are top management's chief characteristics in terms of knowledge, skills, background and style? If the HEI or school has international operations, does the top management have international experience? Are external executives considered to be part of the top management team?

- Has top management been responsible for the HEI or school performance over the past few years? How many school managers have been in their current position for less than three years? Were they internal promotions or external hires?
- Has the HEI or school established a systematic approach to strategic management?
- What is its level of involvement in the strategic management process?
- How well does top management interact with lower level managers and with the governing board?
- Are strategic decisions made ethically in a responsible manner?
- Is top management sufficiently skilled to cope with likely future challenges?

B. Strategic Managers' Analysis (SMA)

- Who are the senior management team? What are their motivations and interests? How committed are they?
- What have they accomplished in the past? What is their track record for success (or failure)?
- How successful have managers been in developing and meeting budgets and goals?
- What directly relevant experience do they have for the opportunity/strategy they are pursuing?
- What skills do they have?
- Who do they know and who knows them?
- What is their reputation?
- How realistic are they?
- Can they adapt as circumstances warrant?
- Does the HEI or school have the people/partners (expertise/skills) they need to execute the strategy? Who else do they need?
- Can the HEI or school attract and retain the people/partners they need?
- Who are the key people in the HEI or school and who are their key partners? What would happen if they left?
- How do (or would) the people in the HEI or school and key partners respond to adversity?
- How well do they work together?
- Can the HEI or school leaders make the inevitably hard choices that have to be made?

III. Internal Environment Analysis (IEA): Strengths and Weaknesses of SWOT

A. HEI or School Structure Analysis (SSA)

- How is the HEI or school structured at present?
 - a) Is the decision-making authority centralized around one group or decentralized to many units?

- b) Is it organized on the basis of functions, projects, geography or some combination of these?
- Is the structure clearly understood by everyone in the HEI or school?
- Is the present structure consistent with the HEI's or school's objectives, strategies, policies and programs, as well as with their international operations?
- In what ways does the institution compare with similar ones?
- HEI or School Structure Analysis in terms of:
 - How mechanistic/organic are the structures?
 - How flat/hierarchical are the structures?
 - How formal/informal are the structures?
 - Do structures encourage collaboration or competition?
 - What type of power structure do they support?

B. HEI or School Culture Analysis (SCA)

- Is there a well-defined or emerging culture composed of shared beliefs, expectations and values?
- Is the culture consistent with the current objectives, strategies, policies and programs?
- What is the culture's position on important issues facing the HEI or school (that is, on productivity, quality of performance, adaptability to changing conditions, and internationalization)?
- Is the culture compatible with the diversity of employees' backgrounds?
- Does the HEI or school take into consideration the values of each nation's culture in which it operates?
- Cultural Web Analysis (CWA) in terms of:

Stories

- What core beliefs do stories reflect?
- How pervasive are these beliefs (through levels)
- Do stories relate to:
 - * Strengths or weaknesses?
 - * Successes or failures?
 - * Conformities or mavericks?
- Who are the heroes and villains?
- What norms do the mavericks deviate from?

Routines and rituals

- Which routines are emphasized?
- Which would look odd if changed?
- What behavior do routines encourage?
- What are the key rituals?
- What core beliefs do they reflect?

- What do training programs emphasize?
- How easy is it for rituals/routines to change?

Control systems

- What is most closely monitored/controlled?
- Is emphasis placed on reward or punishment?
- Are controls related to history or to current strategies?
- Are there too many/too few controls?

Power structures

- What are the core beliefs of the leadership?
- How strongly held are these beliefs (idealistic or pragmatic)?
- How is power distributed in the HEI or school?
- Where are the main barriers to change?

Symbols

- What language and jargon are used?
- How internal or accessible are they?
- What aspects of strategy are highlighted in publicity?
- What status symbols are there?
- Are there particular symbols that denote the HEI or school?

Overall

- What is the dominant culture (defender, prospector, analyzer)?
- How easy is this to change?

C. HEI or School Resources Analysis (SRA)

The current dominant view of business strategy – **resource-based theory** – is based on the concept of economic rent and the view of the HEI or school as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making.

The resource-based perspective highlights the need for a fit between the external market context in which a school operates and its internal capabilities. According to this view, a HEI's or school's competitive advantage derives from its ability to assemble and exploit an appropriate combination of resources to create and deliver on the **VALUE** needed by the stakeholders. Sustainable competitive advantage is achieved by continuously developing existing and creating new resources and capabilities in response to rapidly changing market conditions.

HEI or School Resources Analysis (SRA) is used to:

1. Identify the resources' availability to the institution in supporting its strategies both from within and outside. Some of these resources may be unique in the sense that they are difficult to imitate: for example, patented education products, low-cost sources of supply, or the location of a facility.
2. Assess competence. This requires an analysis of how resources are being deployed to create competences in separate activities, and the processes through which these activities are linked together. Usually, the key to good or poor performance is found here rather than in the resources per se. Value chain analysis can be useful to understand and describe these activities and linkages.
3. Reach a threshold level of competence in all the activities which the institution undertakes, even though it is only some of these activities which are core competences. These are the competences which underpin the HEI's or school's ability to outperform competition (or demonstrably provide better value for money). They may also provide the basis on which new opportunities can be created.

The key questions here are to determine:

1. What internal resources are used by the HEI or school to capitalize on the market opportunities within the realms of threats facing it?
2. What internal capabilities have been converted to its competence, core competence or its distinctive competence to achieve and sustain competitive advantage?
3. What and how will the HEI or school create its competence based on utilizing its marketing resources, financial resources, research and development resources, operation and logistics resources, human resources and information resources to perform better than its competitors?
4. What and how will these resources, internal processes and activities create or destroy value in the final education products or services offered. This will lead to the determination of the strengths and weaknesses of the institution's resources.

- **Marketing Resources Analysis (MRA)**

- a) What are the current marketing objectives, strategies, policies and programs of the HEI or school?
 - i. Are they clearly stated, or merely implied from performance and/or budgets?
 - ii. Are they consistent with the mission, objectives, strategies and policies, and with the internal and external environments of the HEI or school?
- b) How well is the HEI or school performing in terms of an analysis of its market position and marketing mix (that is, product, price, place and promotion) in both domestic and international markets? What percentage of sales comes from foreign students?

- What trends emerge from this analysis?
 - Is the total market for the HEI or school product or service large and/or rapidly growing?
 - What impact have these trends had on the past performance of the HEI or school and how are they likely to affect its future performance?
 - Does this analysis support the past and pending strategic decisions of the HEI or school?
 - Does marketing provide the institution with a competitive advantage?
 - Is the education product/service based on a new technology or business concept?
 - How easy (or difficult) is it to describe (To describe what??) to people outside the HEI or School?
 - How easy (or difficult) will it be for people to learn to use the product or to access and use the service?
 - How easy (or difficult) is it to distribute the product or service?
 - How reliable are key suppliers?
 - Is supplier costs expected to go up, down or remain stable?
 - How easy (or difficult) is it to find a reputable supplier for each of the core inputs to the education products and services of the HEI or school?
 - What is the price of the education product for each segment? What is the total cost to the customer?
 - How does (or will) the HEI or school achieve revenues from its education products and services?
 - Do education products and services set the standard for quality in the industry and across industries?
- c) How well does the marketing performance of this HEI or school compare with that of similar institutions in terms of market and cost performance.

Market Performance Analysis (MPA) of the program and the HEI or school

- Is the total market for the education product or service large and/or rapidly growing?

For each program market segment:

- Who is the customer?
- Who makes the purchase decision and how is it made?
- How do customers learn about this education product?
- How long is the sales (and adoption) cycle? (This includes the time required to sell the education product or service and for the customer to adopt it and begin effective use.)
- To what degree is the education product/service a compelling purchase for the customer?
- How much effort will it take for the customer to purchase and use the education product or service?

- What is the price of the education product for each segment? What is the total cost to the customer?
- What are the channels through which this education product is (or will be) distributed?
- How much does it cost (time and resources) to acquire and keep a customer?
- How much does it cost to produce and deliver the education product/service?
- How much does it cost to support a customer over time?
- Are there substitute products/services that are already in use? How easy (or difficult) will it be for people to switch?
- How much does it cost (time and resources) to acquire and keep a customer?
- How much does it cost to produce and deliver the product/service?
- How much does it cost to support a customer over time?
- What are the program's strengths and weaknesses?
- What resources (i.e. channels, suppliers, capital, people) do they control?
- How will they respond to the company's entry into the market?
- What options does the HEI or school have to respond to competitors' actions?
- Who else might be able to observe and exploit the same opportunity?
- Are there ways to co-opt potential or actual competitors by forming alliances?
- How successful has the school been in attracting and retaining top talent (e.g. employees, management, partners and students)?
- Is the school widely regarded as a top performer and a well-run HEI or school?

Competitors' Performance Analysis

- Who are the current competitors?
- What are their strengths and weaknesses?
- What resources (e.g. channels, suppliers, capital, people) do they control?
- How will they respond to the HEI's or school's entry into the market?
- What options does the institution have to respond to competitors' actions?
- Who else might be able to observe and exploit the same opportunity?
- What resources do they (could they) control?
- Are there ways to co-opt potential or actual competitors by forming alliances?

Cost Performance Analysis (CPA)

This approach tries to determine how much it costs to operate the institution and execute its strategy. It considers the efficiency and effectiveness of the utilization of its key resources and how it has contributed to bottom-line performance.

- People: Employees, consultants (salaries, benefits and options), hiring, developing and training.
- Advertising /Marketing /Sales: Identify customers, markets and sell the institution's products and services.
- Materials and supplies: Costs to procure materials and supplies (includes those involved in developing products and delivering services; office and administrative supplies).

- Fees: Charges for the regular receipt of products, information or services from third parties (including transaction fees and commissions).
- Physical infrastructure: Facilities and equipment.
- Information technology infrastructure: Computers, networks, development costs, operating and maintenance costs.

This will also determine how does (or will) the school achieve revenues from its products and services.

- d) Are HEI or school managers using accepted marketing concepts and techniques to evaluate and improve product performance? (Consider product life cycle, market segmentation, market research and product portfolios.)
- Will using the HEI's or school's education product fundamentally change the way that people work, play or make decisions?
 - How much customization is required to make the school product useful for a customer or for users within a customer site?
 - How long is the institution cycle? (This includes the time required to sell the product or service and for the customer to adopt and begin effective use.)
 - Who makes the purchase decision and how is it made?
 - To what degree is the product/service a compelling purchase for the customer?
 - Are costs managed to enable price competitiveness?
 - How successful have managers been in developing new products and services and successfully introducing them into the market? Is the product/service lifecycle appropriate given the industry, competitive situation, and market requirements?
 - Are operations cost-effective and efficient?

- **Financial Performance and Position Analysis (FPPA)**

- a) What are the current financial objectives, strategies, policies and programs of the HEI or school?
- Are they clearly stated or merely implied?
 - Are they consistent with the mission, objectives, strategies and policies, and with internal and external environments of the HEI or school?
- b) How well is the HEI or school performing in terms of financial analysis?
- What trends emerge from this analysis?
 - Are there any significant differences when statements are calculated in constant versus the reported SAR?
 - What impact have these trends had on past performance and how will they probably affect future performance?
 - Does this analysis support the past and pending strategic decisions of the HEI or school?
 - Does finance provide the HEI or school with a competitive advantage?

- c) How well does the financial performance of this HEI or school compare with that of similar institutions?
- d) Are financial managers using accepted financial concepts and techniques to evaluate and improve current corporate and divisional performance? (Consider financial leverage, capital budgeting, ratio analysis.)
- e) What is the role of the financial manager in the strategic management process?

- **Research and Development Resource Analysis (RDRA)**

- a) What are the current R&D objectives, strategies, policies and programs of the HEI or school?
 - Are they clearly stated, or merely implied from performance and/or budgets?
 - Are they consistent with the mission, objectives, strategies and policies, and with internal and external environments of the HEI or school?
 - What is the role of technology in the performance of the HEI or school?
 - Is the mix of basic and applied research appropriate given the HEI's or school's mission and strategies?
 - Does R&D provide the HEI or school with an advantage?
- b) What return is the school receiving from its investment in R&D?
- c) Is the HEI or school competent in technology transfer? Does it use concurrent and cross-functional work teams in the institution's product and process design?
- d) How well does the investment of the HEI or school in R&D compare with the investments of similar institutions?
- e) What is the role of the R&D manager in the strategic management process?

- **Operations and Infrastructure Resource Analysis (OIRA)**

- a) What are the current operation and infrastructures (inclusive of learning resources, facilities and equipment), objectives, strategies, policies and programs of the HEI or school?
 - Are they clearly stated, or merely implied from the HEI's or school's performance and/or budgets?
 - Are they consistent with the mission, objectives, strategies, policies and environments of the HEI or school?
- b) What are the type and the extent of operations and infrastructures (inclusive of

- learning resources, facilities and equipment) of the HEI or school?
- If product-oriented, consider the institution's operations and infrastructures (inclusive of learning resources, facilities and equipment), the type of operation system, the age and type of equipment, the degree and role of automation and/or robots, the institution's capacities and utilization, its productivity ratings, and the availability and type of transportation.
 - If service-oriented, consider operations and infrastructures (inclusive of learning resources, facilities and equipment); service facilities (HEI or school buildings, libraries, administrative services, registration, and other support infrastructure); the type of operation systems (continuous service over time to the same clientele or intermittent service over time to varied clientele); age and type of supporting equipment; degree and role of automation and/or use of mass communication devices; facility capacities and utilization rates; efficiency ratings of professional/service personnel; availability service personnel; and availability and type of transportation to bring service staff and clientele together.
- c) How well does the operations and infrastructures (inclusive of learning resources, facilities and equipment) of the HEI or school perform relative to the competition? Consider costs per unit of faculty and staff, materials and overheads, downtime, scheduling of programs, program ratings, facility utilization percentages, and the number of students successfully graduating from programs.
- What trends emerge from this analysis?
 - What impact have these trends had on the past performance of the HEI or school and how are they likely to affect its future performance?
 - Does this analysis support the past and pending strategic decisions of the HEI or school?
 - Do operations provide the HEI or school with a competitive advantage?
- f) Are program managers managing the operations and infrastructures (inclusive of learning resources, facilities and equipment) using appropriate concepts and techniques to evaluate and improve the current performance of the program(s)? Consider cost systems, using an activity-based costing system (ABC), quality control, reliability systems, inventory control management, personnel scheduling, TQM, learning curves, safety programs, and six sigma programs that can improve efficiency of service.
- g) What is the role of the operations or program manager in managing the operation and infrastructures (inclusive of learning resources, facilities and equipment) in the strategic management process?
- h) How do the HEI or school compare to other HEIs or schools in their industry and

to benchmarks outside their industry?

- New HEI or school product or program development and design
- HEI or school or program fulfillment
- Student services and support
- Marketing (% of new, high-quality students won)
- How effective and efficient is the HEI or school in its management processes?
- Scanning the environment and planning strategy
- Capital resource planning and management
- Operating resource planning and management
- Performance measurement and management (people/partners and processes)
- Hiring, training and developing people and partners

- i) Are people grouped into work units that help them focus attention on priorities, and efficiently and effectively accomplish their jobs?
- j) Do individuals and team within the HEI or school have the authority and accountability to do their work?
- k) Do incentive systems motivate individuals and teams to make decisions and take action consistent with the priorities and responsibilities of their HEI or school?
- l) Are the age, quality and functionality of physical facilities, equipment and technology appropriate, given the requirements for today and in the future?
- m) Do students, faculty members, suppliers/ business partners and employees within the HEI or school have access to the information they need to make decisions and take action, as well as to coordinate and control operations?
- n) Is information relevant, readily available and easy to access by everyone who needs it?
- o) Are information and communication systems secure, reliable and accurate?
- p) Does the HEI or school possess the necessary system development and project management expertise to enable timely, efficient and effective deployment and maintenance of information-based products and services for use inside and outside the institution?

- **Human Resources Management Analysis (HRMA)**

- a) What are the current HRM objectives, strategies, policies and programs of the HEI or school?

- Are they clearly stated, or merely implied from performance and/or budgets?
 - Are they consistent with the mission, objectives, strategies and policies, and with internal and external environments of the HEI or school?
- b) How well is the HEI's or school's HRM performing in terms of improving the fit between the individual employee and the job? Consider turnover, grievances, strikes, layoffs, employee training, and quality of work life.
- What trends emerge from this analysis?
 - What impact have these trends had on past performance and how will they probably affect future performance?
 - Does this analysis support the past and pending strategic decisions of the HEI or school?
 - Does HRM provide the HEI or school with a competitive advantage?
- c) How does the HRM performance of this HEI or school compare with that of similar institutions?
- Who are the senior management team? What are their motivations and interests? How committed are they?
 - Can the leaders of the HEI or school make the inevitably hard choices that have to be made?
- d) Are school managers using appropriate concepts and techniques to evaluate and improve performance? Consider the job analysis program, performance appraisal system, up-to-date job descriptions, training and development programs, attitude surveys, job design programs, quality of relationship with unions, and use of autonomous work teams in the HEI, school or programs.
- e) How well is the institution managing the diversity of its workforce?
- f) What is the role of the manager in the strategic management process?
- What have they accomplished in the past? What is their track record for success (or failure)?
 - What directly relevant experience do they have for the opportunity/strategy they are pursuing?
 - Can they adapt as circumstances warrant?

- **Information Systems Analysis (ISA)**

- a) What are the current IS objectives, strategies, policies and programs of the HEI or school?
 - Are they clearly stated or merely implied from performance and/or budgets?
 - Are they consistent with the mission, objectives, strategies and policies, and with internal and external environments of the HEI or school?
- b) How well is the institution's IS performing in terms of providing useful databases, automating routine clerical operations, assisting managers in making routine decisions, and in providing information necessary for making strategic decisions?
 - What trends emerge from this analysis?
 - What impacts have these trends had on past performance and how are they likely to affect future performance?
 - Does this analysis support the past and pending strategic decisions of the HEI or school?
 - Does IS provide the HEI or school with a competitive advantage?

D. **Internal Environment Factors Analysis Summary (IEFAS)**

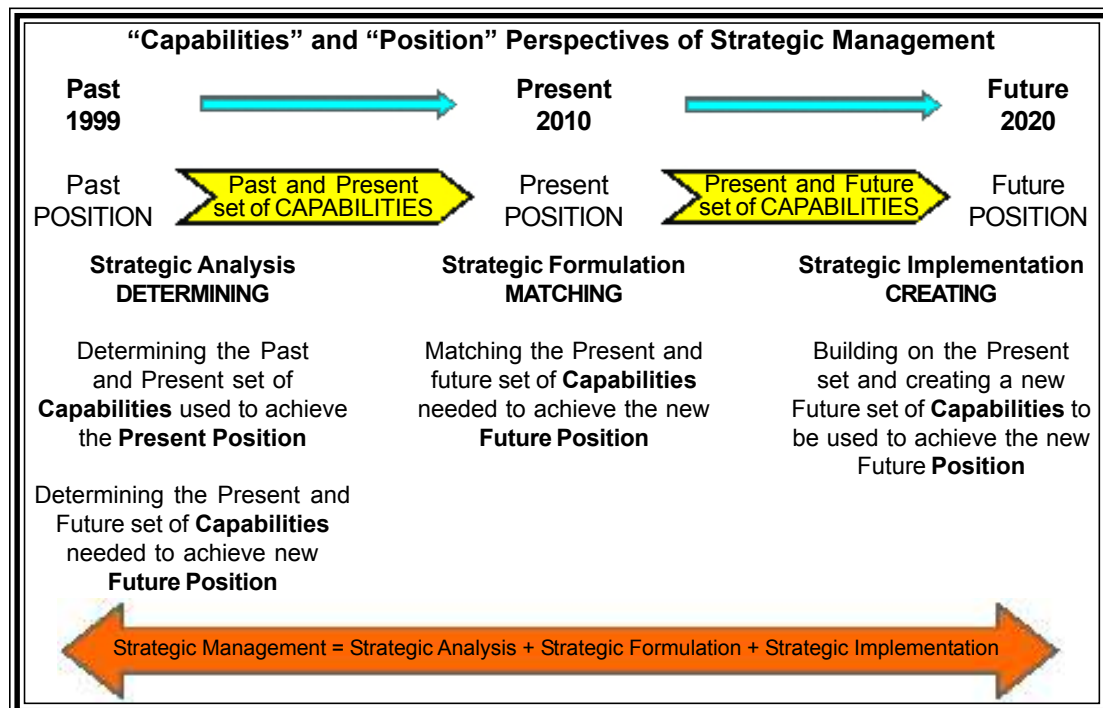
- Which of these factors are the most important to the HEI or school, and to the industries in which it competes at the present time? Which will be important in the future?

Chapter 4

External Environment Analysis and Assessment

Objectives of the Chapter

- To understand why an external environment needs to be undertaken.
- To understand what External Environment Analysis is about within the context of the “capabilities and position” perspective of strategic management.
- To understand how to conduct a macro environment analysis using various models of analysis of a social environment analytical framework.
- To understand how to conduct an analysis of the education industry for a HEI or school.
- To understand how to identify and analyze the customers’ needs that affects their purchase decisions.
- To understand how to conduct a competitive analysis of competing providers of educational products.
- To understand the mechanism used to identify the strategic factors of the internal environment analysis.
- To understand the mechanism used in identifying the strategic factors of the internal and external environment analyses leading to the strategic SWOT.



4.1 External Environment Analysis

With the fast-moving changes (Brand, 1993, p. 7) and dynamic pace of development in the

education arena, all HEIs (Higher Education Institutions: please note that in this book all academic institutions or universities are classified as HEIs) are trying to outdo each other to gain a larger share of the local, international and global education markets (Currie and Newsom, 1998; Scott, 1998). With many players offering more programs to different target markets based on purchasing power, the education industry has become commercialized; this is affecting the quality of education due to declining resources and more competitive market players (Brand, 1993; Zemsky, Massy and Oedel, 1993), together with the existence of a vicious cycle of paper-chasing. Due to decreasing public funding, increased competition, and over-commercialization and internalization to achieve “economic” needs rather than meeting the needs and concerns of the public, HEIs are now more business-oriented which is leading to a deterioration in educational quality (Haworth and Conrad, 1997; Bowden and Marton, 1998). This has placed such institutions in a dilemma and they now have a fervent need to perform better in the eyes of their stakeholders. In fact, Yin et al. (2002) noted that education policy must include economic considerations, changing the internal structures of the education system by identifying, procuring and allocating appropriate resources that will enhance the efficiency of the system and its sub-systems in order to meet both short- and long-term economic and social demands. This was and still is the scenario in the education industry in the West and is one that is now being replayed in the education arenas of most Asian and Middle Eastern countries who are trying to emulate their Western peers. In finding a balance between academic excellence and market expectations, Trout (1997a) noted: “In the marketplace, consumerism implies that the desires of the customer reign supreme . . . and that the customer should be easily satisfied. . . . When this . . . model is applied to higher education, however, it not only distorts the teacher/student mentoring relationship but renders meaningless such traditional notions as hard work, responsibility, and standards of excellence”. Addressing this dilemma, Ruben (2003) identified basic issues that should be addressed in pursuing excellence in higher education as follows:

- Increasing our understanding of the needs of the internal and external environments of new technology and information-based stakeholders,
- Becoming more effective learning organizations,
- Integrating assessment, planning and improvement.

Regarding this scenario in the next few decades, an external environment analysis (Mason, 2007) is undertaken in order to understand the external environmental, social, and industrial factors, as well as customers and competing providers of education products that are likely to have an impact on the ways and means the HEI or school will use to achieve its staked-out position in the industry. This analysis needs to identify those external factors that will influence or affect the way that the HEI or school will act to offer its education product(s) and to convince customers to select these rather than the products offered by its rivals.

These external factors are ultimately the opportunities that the HEI or school can capitalize on to fill gaps in the needs of customers: products or services that are not provided by rival HEIs

or schools. At the same time, this set of external factors also represents the threats that might affect the future well-being or even the survival of the institution; these threats may be the result of social or external factors that are actually beyond the control of the HEI or school. These two sets of external factors are collectively called the opportunities and threats and they will affect the staked-out “position” of the HEI or school as envisioned in its vision and mission statements.

A good grasp of these external factors will affect the strategic measures devised to capitalize on the opportunities and to mitigate the threats affecting the institution’s position. This will also affect the development of a set of capabilities and capacities that will help the institution to better manage its internal capabilities and capacities in order to achieve its position in the education industry.

There are variations of models, frameworks and approaches that can be used to determine the external environment that will represent both the opportunities and threats that exist in the industry and that will affect the position of the HEI or school. These approaches include: Bishop, Hines and Collins (2007) who elaborated on Scenario development; the Chaos Theory of Bechtold (1997); and Game Theory, as discussed by Brandernburger and Nalebuff (1995); all of these aim to determine what the future holds for the organization. In this book, some of the more conventional major frameworks for external environmental analysis mentioned are:

- Societal Environment Analysis (or the BPEST: Business, Political-Legal, Economics, Socio-Cultural and Technological analysis) with its complements of Interest Group Analysis, Community Analysis, Market Analysis, Competitor Analysis, Supplier Analysis and Governmental Analysis.
- Industry Analysis (or the 5 Force or 6 Force Analysis).
- Customer and Key Competitors’ Analysis.

All of the analytical frameworks above identify a set of external factors. Collectively, these are called:

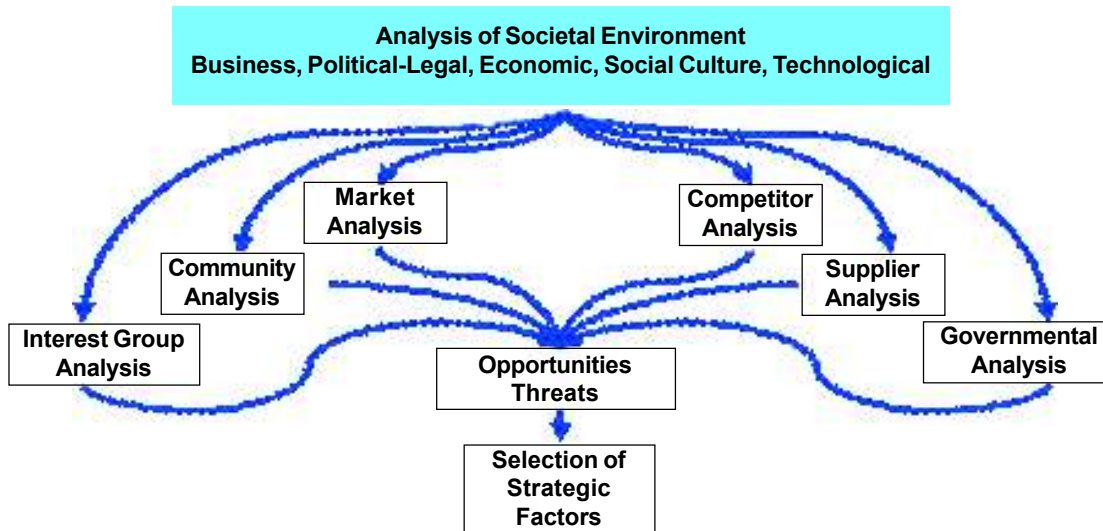
- **Opportunities** – the external factors that constitute windows of opportunity to the HEI or school based on the capabilities and capacities of institution. Since the strengths and weaknesses of each HEI or school are different, a set of opportunities that is available to a particular institution might not represent the same opportunities to another. This inevitably means that capitalizing on windows of opportunity is dependent on the capabilities and capacities of the individual HEI or school.
- **Threats** – the external factors that constitute potential dangers that the HEI or school needs to defend itself against. The same threats that exist for a HEI or school also depend on its capabilities and capacities as, the better the capabilities and capacities set, the better the HEI or school can mitigate these potential future problems which could otherwise impede it in attempting to achieve its staked-out position.

4.2 Societal Environment Analytical Framework

The overall analysis of the societal environment is aimed at identifying the key external factors that currently have an impact on the overall position of the HEI or school, and/or that might occur in the future. Even though it is accepted that future events are uncertain, conducting an external analysis is important to gain a better understanding of future scenarios that might occur. This understanding could reduce the degree of risks that are systemic (caused by the system itself and which are generally predictable) and that are non-systemic (i.e. those due to natural problems or calamities that are beyond the control of the HEI, school or industry). As such, the external environment analysis aims to arrive at a set of operational scenarios based on the prediction of certain outcomes and trends that could contribute to the mitigation or reduction of systemic risks. It should be noted here that the degree of success in anticipating future trends is dependent on:

1. The type and nature of the information that is available to support the analysis. The better the quality of the information, the better the supporting evidence for scenario planning or for other sophisticated future planning and predictive models.
2. The degree of capability and capacity to analyze and interpret these datasets and information by the human mind.

Figure 4.1: Analytical Framework of the Societal Environment



In any case, the external environmental factors that collectively and comprehensively represent the predictors of the future require in-depth analysis (McGrath and MacMillan, 1995; Pollard and Hotho, 2006; Radcliffe, 2000 and 2006; Walsh, 2005) in order to understand their potential effects and impact on the future operating environment of the HEI or school in the education industry. The societal environment analysis, as shown in Figure 4.1, covers three main sets of analysis:

1. The macro environment that affects all the firms and organizations (both public and private) regardless of their industry. These macro factors are the BPEST (Business, Political-Legal, Economic, Socio-Cultural and Technological) and these are normally beyond the control of the individual industry.
2. The micro environment which is the industry within which the firm or organization is operating; this is industry-specific and the type of risks and operational factors are also specific to an industry.
3. The stakeholders' environment that collectively covers the interest groups, the community, the immediate operating environment and its vicinity, the market or customer group, its segments and targeted customer groups, competitors, suppliers, and governmental or regulatory groups. An understanding of the stakeholders enables the HEI or school to customize its education products to meet the needs and expectations, within regulatory obligations, to serve and satisfy the targeted customers.

4.3 BPEST Analysis

Table 4.1: Variables for BPEST Analysis

Business	Political-Legal	Economic	Social-Cultural	Technological
<ul style="list-style-type: none"> State of the education industry: <ul style="list-style-type: none"> - known - projected 	<ul style="list-style-type: none"> Legislation: <ul style="list-style-type: none"> - Education law - Labor laws - Environment protection Law Antitrust regulations Environmental protection laws 	<ul style="list-style-type: none"> Interest rates Employment levels Business cycles GDP trends Wage/price controls Devaluation/revaluation Energy availability and cost Disposable and discretionary income 	<ul style="list-style-type: none"> Skill levels Population changes and demographics Rate of family formation Growth rate of population Age distribution of population Regional shifts in population Life expectancies Birth rates 	<ul style="list-style-type: none"> Developments in: <ul style="list-style-type: none"> - IT - Industrial applications - new energy sources - suppliers inputs availability
<ul style="list-style-type: none"> The Market: <ul style="list-style-type: none"> - current demand - projected demand - buyer behavior - market segments 	<ul style="list-style-type: none"> Support for education <ul style="list-style-type: none"> ■ Tax laws Taxation policy Laws on hiring and promotion 	<ul style="list-style-type: none"> Inflation Money supply and Exchange rate 	<ul style="list-style-type: none"> Consumer confidence Social mobility Career expectations 	<ul style="list-style-type: none"> Government Spending on research Government and industry focus of technological effort
<ul style="list-style-type: none"> Competitors: <ul style="list-style-type: none"> - Market share? - Newcomers? - Mergers? - Failures? - Alternative products? - International players? 	<ul style="list-style-type: none"> Developments in EU, WTO, GATT Political changes in major markets Special incentives Foreign trade regulations Attitudes toward foreign companies 	<ul style="list-style-type: none"> Public expenditure (infrastructure) State of the national and international economy, Third world economies 	<ul style="list-style-type: none"> Consumerism Life style changes and Spending patterns Attitudes to work/leisure Consumer activism 	<ul style="list-style-type: none"> New discoveries or developments Speed of technology Transfer Patent protection New products
<ul style="list-style-type: none"> Suppliers: <ul style="list-style-type: none"> - Reliability? - Alternative? 	<ul style="list-style-type: none"> Government stability 	<ul style="list-style-type: none"> Shareholder confidence Terms of trade 	<ul style="list-style-type: none"> Education level 	<ul style="list-style-type: none"> Rates of obsolescence Focus of technological efforts transfer from lab to market place. Productivity improvements through automation

Source: Adapted from Cole 1994 and Johnson /Scholes 1993.

The models normally used to identify the macro factors are the BPEST, PEST or SPELT models which all include the business, political-legal, economic, socio-cultural and technological factors that influence the operation of firms and organizations, regardless of their industry. One example is the interest rate whereby a two-point reduction would mean that the cost of borrowing would be lower, thus affecting the cost of investment in expansion and the potential for growth. The difference across the industries would be in the uses of the funds. A

summative set of factors, as shown in Table 4.1, could be used as variables for each of the components of the BPEST in order to provide guidelines for analysis based on these factors. The outcome should be a set of Opportunities or Threats, based on the macro environment analysis using the BPEST.

4.4 Stakeholders' Analysis

The stakeholders (see Figure 4.1) are very important to the HEI or school as they constitute the groups of people who have both a direct and indirect vested interest in the institution. The stakeholders' involvement plays an important role in the overall position of the HEI or school and a key element in determining the stakeholders' interest is the value they derive from a relationship with the HEI or school. A positive relationship is based on the stakeholders deriving a "take home value" (Nusland, Olsson and Karlsson, 2006; Treacy and Wiersema, 1993) and continued value over the duration of the relationship (Anderson, Narus, and Rossum, 2006). As such, in the stakeholders' analysis, a key dimension is based on the adaptation of the generic equation of the Customer Value (CV), mentioned earlier (Gale, 1994): ***Stakeholder's Value (SV) = f [Product Quality (PQ), Service Quality (SQ), Image (I), Relationships (R)] / Cost (C)***. As shown in Figure 4.1, the stakeholder groups are:

- **Market Group Analysis:** This is the main and most directly targeted group that the HEI or school serves; this group is one of the most influential and demanding in the SV equation. The group comprises as follows:
 - **Students** – This is the main stakeholder group that purchases and consumes the educational products and services leading to the creation of competent and qualified "total" graduates in terms of Intelligence Quotient (IQ), Emotional Quotient (EQ), Adversity Quotient (AQ) and Morality Quotient (MQ). To achieve all these components, the contribution to the SV by the PQ should be very high; the contribution of the SQ, as the supporting infrastructure and services supporting teaching-learning, should be high; the R should be high in order to be student-centered; and I and C should be moderately high. What is important here is that the students are at the same time the "raw material" and the "product"; they are also the "customers" as they are able to select what they need and what is most appropriate for their own future. A commonly overlooked issue is that the "student" is part of the four- or five-year educational process that turns him/her into the final product that must be of future use to society. It must also be noted that these students live in an age of technology where the pedagogical processes must enhance their interactions and this new way of life. As such, an in-depth analysis of the educational value that these "net gens" or "network generations" students seek should be examined and incorporated into the overall educational value that will deliver their IQ, EQ, AQ and MQ, as well as their TQ (Technology Quotient). This will enhance their lives, which are very different from those produced by the existing education system which is still learning from the past

- and which is not well prepared for meeting the different needs of the future.
- **Graduates** – Students move into the graduate group and these stakeholders represent the “total” graduate who is intellectually, physically, technologically, emotionally, spiritually and morally competent to contribute to the development of society. This is normally a very vocal but powerful “alumni” group that can influence the public image of institutions, colleges or programs as they are the direct outputs and outcomes. As such, the SV contribution should be the same as for the student group (the net gens group), as opposed to the “dinosaur” groups that most educational processes still insist on catering for.
 - **Parents** – Parents, who have a vested interest in seeing their offspring become successful, competent and contributors to society, are the stakeholder group that represents the parental guidance offered to students and graduates; this group normally influences the choice or specifications of the outputs and outcomes. As such, the SV contribution should be the same as for the student group.
 - **Employment Market** – This is the stakeholder group that utilizes the outputs of the institution and evaluates the outcomes of the graduates’ performance in terms of meeting the minimum specifications of knowledge, skills, behavior and values, as well as conformity and compliance. The end outcome is that they want students, who are competent, qualified, can work directly with minimal training, are morally and physically capable and can contribute to their organization and to society. As such, the SV contribution should be the same as for the student group.
-
- **Interest Group Analysis** – This stakeholder group indirectly influences the outcomes of the graduates from a point of view of civic and societal values and social norms to be responsible contributors to society. The stakeholder value (SV) they require from the HEI or school is as follows: PQ should be high as the students should be good citizens who can contribute to society in a purposeful and meaningful way; SQ should be moderately high, I should be moderately high as the interest group is not very firmly fixed on the image of the students’ HEI or school; the R should be high as the group wants the HEI or school to contribute of the society in a positive way.
 - **Communities’ Analysis** – This is the stakeholder group where the institution, college or program is located and one of the main roles of a higher education institution is to ensure that its communities are involved and that its actions contribute to the well-being and development of the surrounding communities. Because they are not direct consumers of the students’ outcomes but expect the HEI or school to be involved in community development, their SV should be similar to that of the interest group.
 - **Competitor Analysis** – A more in-depth analysis of this group is covered later in the Competitor Analysis section.
 - **Supplier Analysis** – This group comprises the supplier markets that cover financial,

resource and teaching faculty suppliers. With the exception of the teaching faculty, which has a direct input into the processing or transformation of the students, and therefore with the needed IQ, EQ, AQ and MQ mentioned above, the other two constitute supporting resources. As such, the SV of the teaching faculty should be similar to that of the students, graduates and the parents as these groups wish to see the highest level of outcome in terms of the education value to the students. As for the financial and resource suppliers, these should be supportive of the SV of the teaching faculty and student stakeholders in order to meet the level of expectations in terms of the transformation process of the students.

- **Government Analysis** – the government group represents the regulator of the quality of the student and graduate output; these should be qualified, competent and able to contribute positively to their communities and to society as a whole. Thus, to achieve this set of capabilities and capacities, government regulators would expect the HEI or school to comply with any regulatory measures that assure the quality and value provided by the educational products and processes offered. As such, the SV computation should be similar to that of the student group.
- **Cost** – Tangible and intangible costs should be reduced as far as possible, but not at the cost of reducing the overall value. The main areas of cost are in the value chain of the HEI and in the intangible costs attributable to the buyers.

4.5 Education Industry Analysis

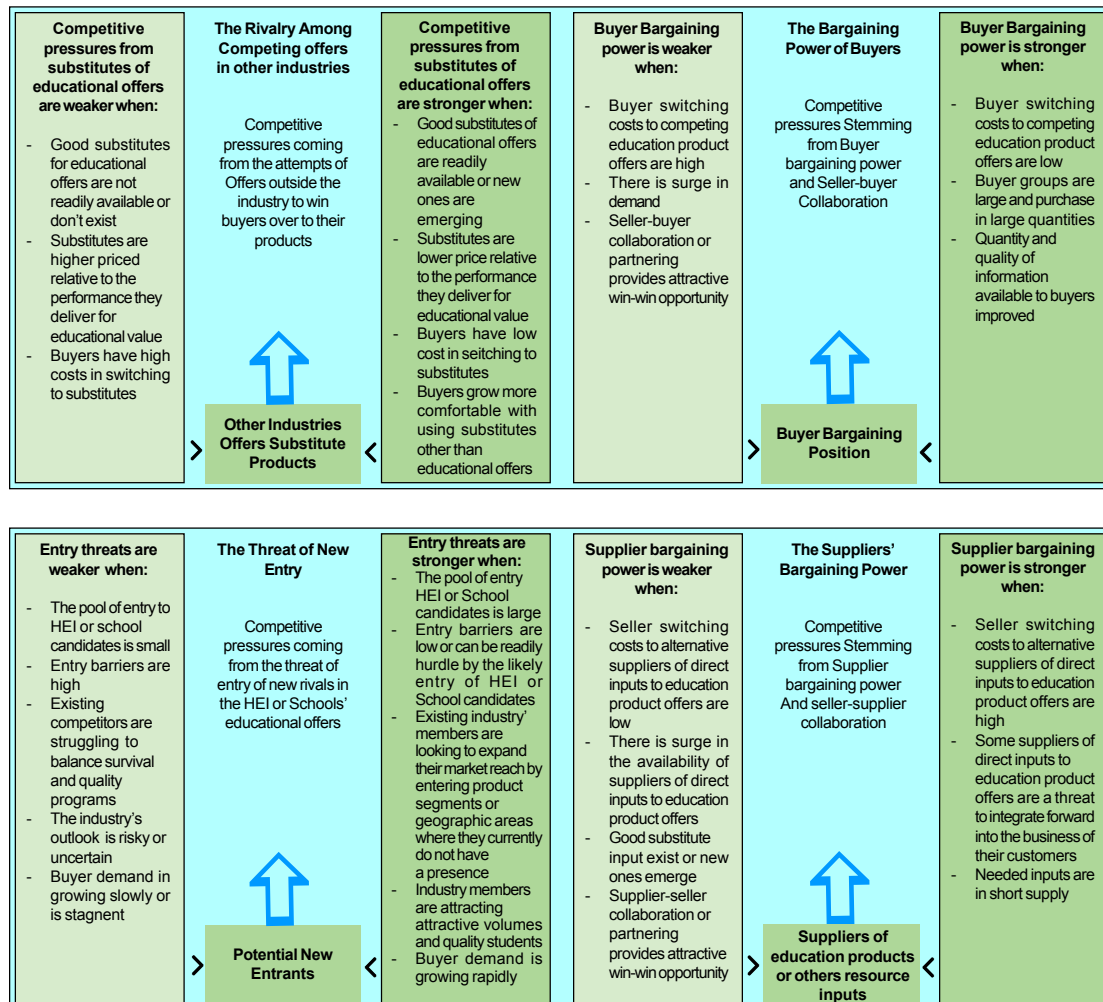
The Five Force Analysis, developed by Porter (1983, 1997 and 1998), has also undergone various adaptations since its first use as an analytical model to determine the key forces at play in an industry (Wilk and Fensterseifer, 2003) that affect its attractiveness or non-attractiveness. These key forces are:

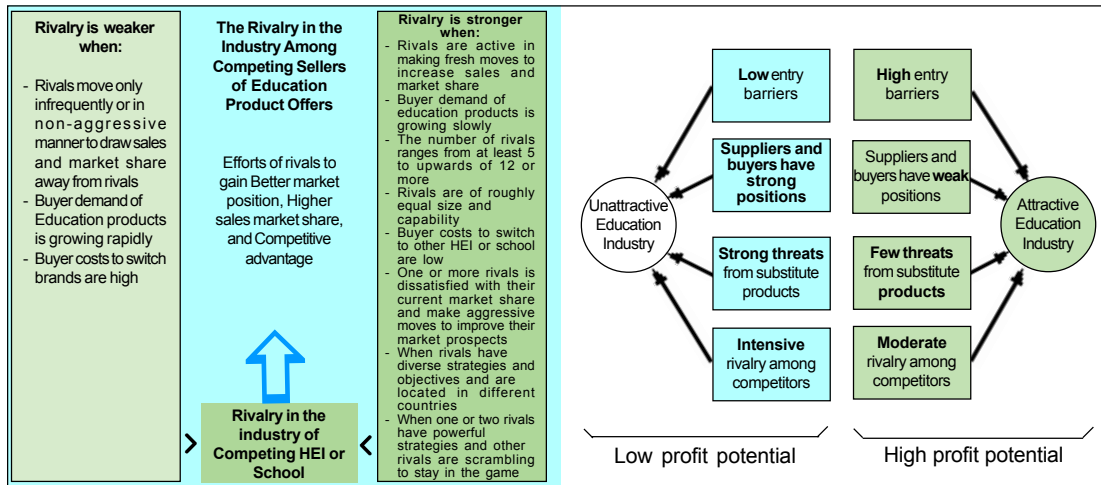
- ***Threat by New Entry*** – The lower the cost to set up a business in an industry, the lower the entry barrier, then the more competitive the industry becomes. Various factors, as noted in Figure 4.2, are also determinants of the threat of new entry.
- ***Threat of Substitutes*** – Substitutes are not directly competing products but are those found in other industries that can stand-in or act as surrogate products to fulfill the same needs and expectations as the existing product on offer. A classic example: contact lenses can meet the same need as glasses or can be rendered obsolete by laser surgery. Thus, the HEI or school should be on the outlook for substitutes for their education products as these could affect demand for its own. Normally, the higher the number of substitutes, or if it is easy to create substitutes, the greater the effect, as shown in Figure 4.2.
- ***Threat of the Bargaining Power of the Buyers*** – It is a serious cause of concern when there are many competing education products on offer and there is a large choice

from a diverse array of products to select from. This puts the bargaining power of choice squarely with the buyers, as shown in Figure 4.2.

- **Threat of Bargaining Power of Suppliers** – As noted earlier, the key suppliers are the teaching faculty who directly influence the creation and delivery of education value in terms of the products on offer. The more competent or qualified the faculty, the higher the bargaining power, especially since the capabilities and capacities that are sought are scarce, and not easily substituted or replaced. Other suppliers, such as market suppliers of financial products and learning resources, as well as infrastructure specialists, can influence the bargaining power relative to the HEI or school. This is shown in Figure 4.2.

Figure 4.2: Education Industry: Five Force Model





Source: Adapted from Porter (1985): *Competitive Analysis of a Firm*, as adapted in Teay (2008); *A Primer on Strategic Organization Analysis and Planning Model*, 4th Edition 2007, AU Digital Press, Bangkok, 2007.

- **Rivalry in the Industry** – Needless to say, the more numerous the competitors, the greater the variety of education products on offer. This leads to more choice, leading, in turn, to more intense competition for a piece of the education industry cake in order to meet demand that is normally constant. There is also normally more competition if the quality of the education product on offer is similar and the consumer perceives little difference in perceived quality.

Based on an analysis of these five forces, a key outcome is to determine whether the industry is attractive or not or whether there is more jockeying for a specific set of students, depending on the different demographic, geographic or psychographic needs of consumer groups. The attractiveness of a specific target market segment will form the basis for deciding whether to stay in or exit from the market or industry, or change focus in order to meet the needs of another target market.

A set of key factors that can be used to determine the relative attractiveness or bargaining power of each of the forces is shown in Table 4.2. For each of the forces, a conclusion must be reached on the overall attractiveness of each force. A summative conclusion of all the forces, to determine the overall attractiveness of the whole industry or target market (and as shown in the worksheet), should be used as the basis for determining the overall attractiveness of the industry.

Table 4.2: Strategic audit worksheet to evaluate the attractiveness of the education industry using the Five Force Model

I Threat of new entrants:	++	+	0	-	--
1. Do large HEIs or schools have a cost performance advantage in your segment of the education industry?					
2. Are there any proprietary product differences in the education industry?					
3. Are there any established brand identities in the education industry?					
4. Do your customers incur any significant costs in switching to other competing education product offers?					
5. Is a lot of capital needed to enter the education industry?					
6. Are serviceable learning resources and equipment expensive?					
7. Does the newcomer to your industry face difficulty in attracting students?					
8. Does experience help you to continuously improve your education products on offer?					
9. Does the newcomer have any problems in obtaining the necessary skilled people, materials or learning resources?					
10. Does your education product or service have any proprietary features which make you a preferred choice?					
11. Are there any qualifications which are difficult to obtain?					
12. Can the newcomer expect strong retaliation on entering the market?					
TOTAL					
Overall attractiveness based on the degree of bargaining power or threat if new entry					

Note:

- (++) factors = very favorable to the industry in terms of impact and opportunity
- (+) factors = favorable to the industry in terms of impact and opportunity
- (0) factors = neither favorable nor unfavorable to the industry
- (--) factors = very unfavorable to the industry in terms of impact and opportunity
- (-) factors = unfavorable to the industry in terms of impact and opportunity

II Bargaining power of buyers: to what extent are your customers locked into your education product offer?	++	+	0	-	--
1. Are there a large number of buyers relative to the number of HEI or schools in the business?					
2. Do you have a large number of customers each with relatively small purchases of education products?					
3. Does the customer face any significant costs in switching to another competing HEI or school?					
4. Does the buyer need a lot of important information?					
5. Is the buyer aware of the need for additional information?					
6. Is there anything which prevents your customer from selecting from another HEI or school?					

7. Are your customers highly sensitive to cost of the education products on offer?					
8. Is your education product unique to some degree or does it have an accepted branding?					
9. Do you provide incentives to the decision-makers?					
TOTAL					
Overall attractiveness based on the degree of the bargaining power of buyers					

III Threat of substitutes: (i.e. from some other product or service which performs the same job as yours)	++	+	0	-	--
1. Substitutes have performance limitations which do not completely offset their lowest price or their performance advantage is not justified by their higher price.					
2. The customer will incur costs in switching to a substitute.					
3. Your customer has no real substitute.					
4. Your customer is not likely to substitute.					
TOTAL					
Overall attractiveness based on the degree of the bargaining power of substitutes					

IV Bargaining power of suppliers for my education products:	++	+	0	-	--
1. My inputs (materials, faculty, staff and other suppliers to the educational products, services, etc.) are standard rather than unique or differentiated.					
2. I can switch between suppliers to the educational products quickly and cheaply.					
3. Many suppliers to the educational products would find it difficult to enter my business or my customers would find it difficult to perform my function in-house.					
4. I can substitute inputs (materials, faculty, staff and other suppliers to the educational products, services, etc.) readily.					
5. I have many potential suppliers for my educational products.					
6. My education business is important to my suppliers.					
7. The cost of my purchases has no significant influence on my overall costs for the education products.					
TOTAL					
Overall attractiveness based on the degree of the bargaining power of suppliers					

V Determinants of rivalry among existing competitors offering education products:	++	+	0	-	--
1. The education industry is growing rapidly.					
2. The education industry is not cyclical with intermittent overcapacity.					
3. The fixed costs of the education business are a relatively low proportion of the total costs.					
4. There are significant product differences and brand identities between the competitors offering education products.					

5. The competitors are diversified rather than specialized.					
6. It would not be hard to get out of this education business because there are no specialized skills and facilities or long-term contract commitments, etc.					
7. My customers would incur significant costs in switching to a competitor.					
8. My education products are complex and require a detailed understanding on the part of a customer.					
9. My competitors are all of approximately the same size as me.					
TOTAL					
Overall attractiveness based on rivalry in the industry					

Overall education industry rating:	Favorable	Moderate	Unfavorable
1. Threat of new entrants			
2. Bargaining power of buyers			
3. Threat of substitutes			
4. Bargaining power of suppliers			
5. Intensity of rivalry among competitors			
TOTAL			
Overall attractiveness of the industry			

Source: Adapted from Porter (1979): "How Competitive Forces Shape Strategy" in Harvard Business Review 57, March - April 1979, pages 86-93.

4.6 Customer Profile Analysis

Understanding the customer is critical to the well-being and survival of a HEI or school. If an institution produces a set of education products that do not convince the customers, this will affect the customer's purchase decision. If the customers decide not to buy, this will then affect the bottom-line financial position of the HEI or school. The key implication here is that the HEI or school must understand the purchase behavior of the consumers, the needs of the customers, and what makes a customer purchase a set of education products to satisfy his/her needs. The customers here are the 'net generation' of students who have come through an education system different from the one their predecessors experienced. This new generation of students, however, is being forced to conform to an archaic education system that does not meet the needs of the future. As such, the imperative here is to understand fully the needs and requirements of the new generation in order to provide education value that "fits the purpose".

It is therefore vital that the HEI or school understands that customers must perceive that their selection of one set of education products over another set is based on added value. This perceived value that customers require, will, if met, satisfy their needs by meeting or even exceeding their expectations. Anything that does not add value to customers will not satisfy their needs and will ultimately affect their satisfaction and possibly, in the longer term, their loyalty.

From the marketing literature, it is clear that one cannot meet the needs of everyone in the whole industry. To attempt to do this, the whole industry would have to be divided into segments based on demographic, geographic or psychographic variables that one would seek to satisfy in order to deliver value to the desired target market. Once targeted, details of the mechanisms and systems to create and deliver this value would have to be worked out thoroughly. The key question is how to operationalize the value so that the desired value can be created and delivered. An adaptation of the generic $CV \text{ (Customer Value)} = f [PQ \text{ (Product Quality), } SQ \text{ (Service Quality), } (I) \text{ Image, } (R) \text{ Relationship}] / (C) \text{ Cost}$ (Gale, 1994) can be used to identify the value equation for a HEI or school as follows:

- ***PQ (Product Quality)*** – This essentially covers the quality of the following inputs: the teaching faculty, curriculum, students as direct input resources, learning resources, infrastructures, facilities and equipment. These quality inputs affect the IQ, EQ, AQ and MQ, as well as the new TQ of students or graduates to be “total students” who are intellectually, mentally, physically and morally competent and can contribute to their personal development and the advancement of society.
- ***SQ (Service Quality)*** – This essentially covers the quality of the services delivered by the service agents: the service and support staff and units. It also covers certain intangibles in the service support or administrative units in the HEI or school, including the accuracy, responsiveness, reliability and empathy of the services rendered.
- ***I (Image)*** – As the variable implies, the image of the HEI or school plays a crucial role in influencing the consumption of the education products on offer. As image is subjective, the next best proxy normally used is the “brand name” which, in this case, is the psychological impact of someone entering a HEI or school that has a high level of perceived prestige.
- ***R (Relationship)*** – This is a very important variable as the trend in education is to move from a teacher-centered to a student-centered approach, placing the student as the focus of teaching “know all, all powerful” teacher to a developmental approach that helps the student to learn and develop more. Relationship management is now a powerful differential that can affect the preference of a student, leading him/her to select one set of education products as opposed to another. This does not apply only to students’ relationship management but to all stakeholders from teaching staff to the community. The better the relationship that is established, the greater the understanding between two parties; the greater the understanding, the more conducive, productive and sustainable the teaching and learning, as well as the mutual benefits achieved for the whole rather than merely the parts.
- ***C (Cost)*** – As noted earlier, the overall cost of a set of education products is not only the price paid for the cost of education; the cost of transportation, time, energy, opportunity and the psychological cost of attending a specific HEI or school, must also be counted. In

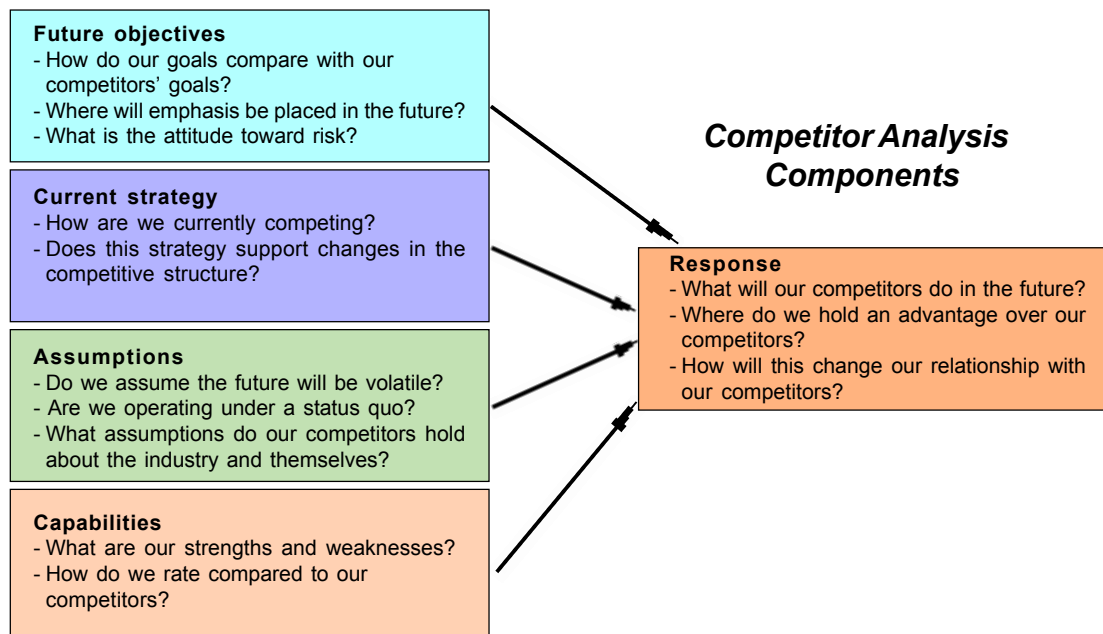
most purchase decisions, it is the latter sets of intangible costs that are most important in terms of the financial cost of the education product as these affect the mental, psychological, social and physical health of the consumer.

The bottom line is that all HEI and schools should consider educational value, which is the final outcome that is created for and delivered to customers based on their needs. This affects the internal processes and the management that is established to deliver this end-value; it also affects the quality of the human, information and organizational capabilities and capacities that need to be built in order to utilize the quality systems and processes to deliver on the ultimate value to the customer. The degree of value will affect the financial value of the HEI or school as, basically, quality management is value management: an in-depth value analysis that needs to be strategically managed.

4.7 Competing Education Product Providers: Analytical Framework

From the industry and customer analyses above, the HEI or school will fully understand its rivals and should then conduct an in-depth analysis of each of their competitors. In the real world the fittest survive and so, as noted by the noted military strategist, Sun Wu, the author of the “Art of War” in the 6th Century BC (as translated by Giles, 2005; Wing, 1988; and Wee, 2003), a key adage is to “Know your enemy” and to identify the enemy’s “Achilles’ heel” or weakest area. The same holds true in any industry: the key capabilities and capacities of competitors should be known and understood, together with their main strengths and weaknesses. This clearer understanding of rivals helps an institution in planning ways to protect itself and/or to attack rivals.

Figure 4.2: Components of the Competitor Analysis Framework



Competitor Analysis (Coughland, 2002) identifies what is being done by competitors, how their objectives are executed, their performance and outcomes, their strategies and assumptions concerning the external environment, and what capabilities they have used to achieve their missions, goals and objectives, and their position in the industry. The key components that require analysis are shown in Figure 4.2. As all this information is neither explicit nor easily available, these facts, data and information must be gleaned from their public relations and marketing data and information which can be interpreted from their marketing actions nor advertising; their strategic intentions may then be assessed.

Carrying out an in-depth competitor analysis is both time-consuming and difficult so an alternative is to use a Competitive Analysis Matrix, as shown in Table 4.2. The critical success factors should first be identified in the industry that one is operating in. In the case of an HEI or school, critical success factors are determined by those attributes that customers will seek when selecting and buying education products that will meet their needs and expectations. These are the purchase decision attributes that they use to compare the diverse education products on offer in order to make a selection. This means that the critical success factors are based on customers' purchasing criteria in selecting a product from among those that are available.

Once the attributes of the purchase decision have been selected, then the HEI or school needs to compare the performance of its own institution with that of its competitors. As different attributes have different levels of importance, weights can be assigned to them, based on their importance to customers. The weighted score (based on the weighting * rating) constitutes a comparative assessment of who offers the highest value for each attribute. An important point is that the HEI or school should do relatively well in an attribute that carries greater weight, as this represents a key strength. Being strong in an attribute that is of minimal importance to the customer does not indicate any relative strength.

Table 4.2: Competitive Education Product Analysis

(These education product attributes must be those that affect the customers' perceived value added in buying from a specific HEI or school rather than a competitor)	Computed Weighted Score = (Weighting * Rating)				
	Weight	HEI	1 st Competitor	2 nd Competitor	3 rd Competitor
Educational Product Value derived from purchase					
Width (variety or cross section coverage) of education product					
Depth (variety within same category) of education product					
Value addition from purchase of education product					
Student centered approach of education product					
Quality of teaching faculty of education product					
Quality of research orientation of teaching faculty					
Quality of learning resources of education product					
Quality of facilities and infrastructure of education product					
Quality of support services of education product					
Image (or brand) of HEI or school					
Contribution to community and social development by HEI or school					
Education product meets employment market needs					
Education product provides knowledge					
Education product provides skills development					
Education product makes the student more capable					
Education product meet tangible costs of pricing and transportation					
Education product meets intangible cost of time, opportunity and psychic cost (Don't know what a 'psychic cost' is.)					
Overall Comparative Performance Analysis of Competing Education Products	1.00				

Guidelines for Assessing the Competitive Strength of the HEI or School versus the Education Products of Key Competing Providers

1. List key success factors and other relevant measures of competitive strength in the industry.
2. Rate key competing products of the HEI or school for each factor using a rating scale of 1 to 10 (where 1 = very weak; 5 = average; 10 = very strong).
3. Decide whether to use a weighted or unweighted rating system, (a weighted system is usually superior because the chosen strength measures are unlikely to be equally important).
4. Total individual ratings to arrive at an overall measure of competitive strength for each rival HEI or school.
5. Determine whether the HEI or school enjoys competitive advantages or suffers from competitive disadvantages based on the overall strength ratings.

4.8 Summary of External Environment Factors Analysis (SEEFA)

The models recommended above, which determine the external environment factors that might have an important impact on the overall future position of the HEI or school, will yield a great many factors. This may result in there being too many factors to deal with, resulting in a set that is not viable as not all the factors would be equally important or have the same degree of impact. To reduce a large number of external factors, a systematic approach is needed to identify, compare and select those external factors that have the highest level of potential impact on the operation and well-being of the future of the HEI or school.

A systematic approach, such as that used for selecting the most important strengths and weaknesses of the HEI or school, is also used to determine the opportunities or threats that are likely to have the greatest impact on the institution. Table 4.3 can be used to evaluate and select these external factors based on two dimensions:

- **Degree of impact:** This is represented by the “weight”: the more relevant the factor (that is, a factor that has a greater potential impact on the future well-being and operation of the institution’s staked out position), the more “weight” that factor is assigned.
- **Rating of how well the HEI or school is addressing this factor:** It is first necessary to determine how well the HEI or school is responding to each factor. The better the factor is being addressed, based on the institution’s capabilities or capacities, the higher the rating from a scale of 1 (very poor) to 5 (outstanding).

Table 4.3: Summary of External Environment Factors Analysis (SEEFA)

External Factors	Weight	Rating	Weighted Score	Comments
1	2	3	4	5
Opportunities				
Threats				
Total Weighted Score	<u><u>1.00</u></u>		<u> </u> <u> </u>	

Notes: 1. List opportunities and threats (5-10) in Column 1. 2. Weight each factor from 1.0 (Most Important) to 0.0 (Not Important) in Column 2 based on that factor’s probable ime impact on the company’s strategic position. The total weights must sum to 1.00. 3. Rate each factor from 5 (Outstanding) to 1 (Poor) in column 3 based onthe company’s response to that factor. 4. Multiply each factor’s weight times its rating to obtain each factor’s weighted score in Column 4. 5. Use Column 5 (comments) for rationale used for each factor. 6. Add the weighted scores to obtain the total weighted score for the company in Column 4. This tells how well the company is responding to the strategic factors in its external environment.

Source: Adapted from T.L. Wheelem and J.D. Hunger, “*External Strategic Factors Analysis Summary (EFAS)*” Copyright © 1991 by Wheelen and Hunger Associates. Reprinted by permission

Based on the two dimensions above, the “weight” is multiplied by the “rating” to obtain a weighted score that can be used to rank factors from the most to the least critical. Only the top 5 to 8 factors should be selected for inclusion in the SEEFA table. This systematic approach identifies the key “opportunities” and “threats” facing the HEI or school, as opposed to the diverse and varied external analysis carried out earlier.

4.9 Strategic Environment Factors Analysis Summary (SEFAS)

Based on the internal environment analysis offered in Chapter 3, which used the Internal Environment Factors Analysis Summary, the HEI has now a set of “strengths” and “weaknesses” that are critical and are likely to have a high degree of impact on the future of the institution based on its capabilities and capacities. The results of the SW are identified in the IEFAS, as discussed in Chapter 3.

A similar approach to identify the “opportunities” and “threats” affecting the future well-being of the HEI or school is discussed in this chapter and culminates in the EEFA here. Now that the institution has SWs from the IEFAS and OTs from the EEFA, the next step is to determine a strategic set of factors that are critical to the overall well-being of the HEI or school. The result of this is the strategic SWOT or the Strategic Environment Factors Analysis. This involves selecting the top two to four factors from each of the SWs (Strengths and Weaknesses) based on their weighted score in the IEFAS, and the top two to four from the OTs (Opportunities and Threats) based on the weighted scores in the EEFA.

Table 4.4: Strategic Environment Factors Analysis Summary (SEFAS)

Strategic Factors (Select the most important opportunities/threats from EEFA, and the most important strengths and weaknesses from IEFAS)	1	2	3	4	Duration			5	6
		Weight	Rating	Weighted Score	SHORT	INTERMEDIATE	LONG		Comments
Total Score		— =		— =					

Notes: 1. List each of your key strategic features developed in your IFAS and EPAS tables in Column 1. 2. Weight factor from 1.0 (Most Important) to Column 2 to 0.00 (Not Important) based on that factor's probable impact on the company's strategic position. The total weights must sum to 1.00. 3. Rate each factor from 5 (Outstanding) to 1 (Poor) in Column 3 based on the company's response to that factor. 4. Multiply each factor's weight times its rating to obtain each factor's weighted score in Column 4. 5. For duration in Column 5 check appropriate column (short term less than 1 year: intermediate- 1 to 3 year; long term - over 3 years). 6. Use Column 6 (comments) for rationale used for each factor.

Source: Adapted from T.L. Wheelen and J.D. Hunger, “*External Strategic Factors Analysis Summary (EFAS)*” Copyright © 1991 by Wheelen and Hunger Associates. Reprinted by permission

Once these SW and OT critical factors have been selected, they should be listed in the SEFAS table; this will result in a list of about 10 to 16 strategic SWOT factors. These are then assigned a weight and a rating based on the degree of impact, with those which are more important being given higher weights. The rating is based on how well the HEI or school is addressing or responding to these SWOT factors. Based on this SEFAS, it is possible to determine the Strategic SWOT (technically the most critical set of strengths, weaknesses, opportunities and threats) facing the HEI or school.

Based on the Strategic SWOT, the HEI or school is then able to determine the strategic issues they are facing. As noted earlier, these strategic issues are:

- i. Future events or trends that may have a significant impact on the HEI, school or program (e.g. deregulation of an academic industry, signing the AFTA trade agreement or various FTAs, changes in the socio-cultural landscape, trends regarding the needs and expectations of potential students and graduates, national development trends, etc.) and/or those that should be closely monitored. These are derived from the opportunities and threats section of the strategic SWOT, as noted above.
- ii. Decisions that the HEI or school is considering making that will have a strategic or dramatic impact (e.g. merging with another university, school or program, changing its strategy, focusing on international operations, etc.).

A key strategic issue will be concerned with a major organizational decision facing the HEI or school as a whole rather than a decision concerning smaller, operational problems. As examples, a major decision would deal with the future of whether the HEI or school should grow, exit from the industry, or withdraw from certain programs of study, or just maintain its present strategic direction.

However, the basic outcome of the internal environment analysis (Chapter 3) and the external environment analysis (Chapter 4) is that the HEI or school should now be able to identify the following:

1. A strategic SWOT based on the SEFAS,
2. A set of strategic issues or decisions about its future.

These two key outcomes are important as they are used to determine the strategies that the HEI or school will develop and implement in the future.

Summary

In the external environment analysis, the aim is to identify a set of external factors: the “opportunities” open to the HEI or school to capitalize on and the “threats” that can impede its future. In this book, based on the “capabilities and position” used earlier, the external environment analysis provides a better understanding of a future position that the HEI or school intends to stake out in the education industry. The key models used to arrive at this set of external factors are:

1. Macro analysis, using Societal Environment Analysis that is relevant for all types of industry.
2. Industry analysis, using the Five Force Model in order to understand the key forces affecting the education industry and which is industry specific.
3. Analysis of stakeholders who have certain claims on the HEI or school based on the value that they seek from the institution.
4. An in-depth Customer Profile analysis using the customer value equation to determine how the HEI or school can create and deliver value; this is based on the customer’s needs in terms of PQ, SQ, I, T and Cost.
5. Competitor Analysis using the Analytical Framework for Competing Education Products to determine the comparative strengths and weaknesses of the competing education products based on customers’ purchase decision attributes.

Based on the models above, the number of external factors produced is then reduced using the EEFAS to determine those that are most relevant and that are likely to have the highest degree of impact, together with how well the HEI or school is addressing each factor.

The SEFAS is used to identify the strategic SWOT in terms of the most critical strengths, weaknesses, opportunities and threats; these are, in turn, employed to devise a set of strategic factors which are critical to the success of the future staked-out position of the HEI or school based on a set of capabilities and capacities.

As noted previously, the internal and external analyses should elicit a Strategic SWOT and thus an identification of the strategic issues facing the HEI or school.

References

1. Anderson, J.C., Narus, J.C. and Rossum, W. V. (2006); Customer Value Propositions in Business Market, Harvard Business Review, March 2006. pp. 1 - 12.
2. Bishop, P., Hines, A. and Collins, T. (2007); The current state of scenario development; an overview of techniques, Foresight, Vol. 9. No. 1 pp. 5 - 25.
3. Bechtold, B.L. (1997); Chaos Theory as a Model for Strategy Development, Empowerment in Organization, Vol. 5. No. 4, 1997 pp. 193 - 201.

4. Bowden, J. and Marton, F. (1998); *The University of Learning - beyond quality and competence in Higher Education*, Kogan Page, London, pp. 95.
5. Brand, M. (1993); *The Challenge to Change: Reforming Higher Education*. Educational Record, Fall 1993 pp. 7-13.
6. Brandenburger, A.M. and Nalebuff, B.J. (1995); *The Right Game: Use Game Theory to Shape Strategy*, HBR July - August 1995, pp. 57 - 71.
7. Coughland, P.J. (2002); *Competitor Analysis: Anticipating Competitive Actions*, Harvard Business Review, February 2002 pp. 1 - 10 .
8. Currie, J. and Newsom, J. (1998); *Universities and Globalization: Critical Perspectives*, (ed.) Thousand Oaks, CA: Sage Publications, 1998. pp. 277.
9. Haworth, J.G. and Conrad, C.F. (1996); *Emblems of Quality in Higher Education*, Allyn and Bacon, London.
10. Mason, R.B. (2007); *The external environment effects on management and strategy; A Complexity Theory Approach*, *Management Decision*, Vol. 45, No. 1 pp. 10 - 28.
11. McGrath, R.G. and MacMillan, I.C. (1995); *Discovery Driven Planning*, *Harvard Business Review*, July - August 1995 pp 430 - 449.
12. Nusland, D., Olsson, A. and Karlsson, S. (2006); *Operationalizing the concept of Value - An action research based model*, *The Learning Organization*, Vol. 13. No. 3 pp. 300 - 332.
13. Pollard, D. and Hotho, S. (2006); *Crisis, Scenarios and the Strategic Management Process*, *Management Decision*, Vol. 44, No. 6. pp. 721 - 736.
14. Porter, M.E. (1983); *Note on Structural Analysis of Industries*, *Harvard Business Review*, June 1983 pp. 1 - 19.
15. Porter, M.E. (1997); *How Competitive Forces Shape Strategy?* *Harvard Business Review*, July - August 1997 pp. 1 - 10.
16. Porter, M. E. (1998); *Competitive strategy techniques for analyzing industries and competitors: With a new introduction*, New York. Macmillan 396 p.
17. Ratcliffe, J. S. (2000); *Scenario Building: a suitable method for property strategic planning*, *Property Management*, Vol. 18. No. 2 pp. 127 - 144.
18. Radcliffe, J.S. (2006); *Challenges for Corporate Foresight: towards strategic perspective through scenario thinking*, *Foresight*, Vol. 8, No. 1, 2006 pp. 39 - 54.
19. Ruben, B.D. (2003); *Pursuing Excellence in Higher Education* (Jossey-Bass Higher and Adult Education Series): Eight Fundamental Challenges, Wiley, John & Sons, Incorporated, November 2003.
20. Scott, P. (1998); *The Globalization of Higher Education*, (ed). Buckingham, UK: Open University Press, 1998. pp.134.
21. Sun Tzu translated by Lionel Giles (2005); *The Art of War by Sun Tzu - Special Edition*. El Paso Norte Press. ISBN 0-9760726-9-6.
22. Sun Tzu translated by Chow-Hou WEE (2003); *Sun Zi Art of War: An Illustrated Translation with Asian Perspectives and Insights*. Pearson Education Asia Pte Ltd. ISBN 0-13-100137-X.
23. Sun Tzu translated by R. L. Wing (1998); *The Art of Strategy*. Seattle, Washington: Main

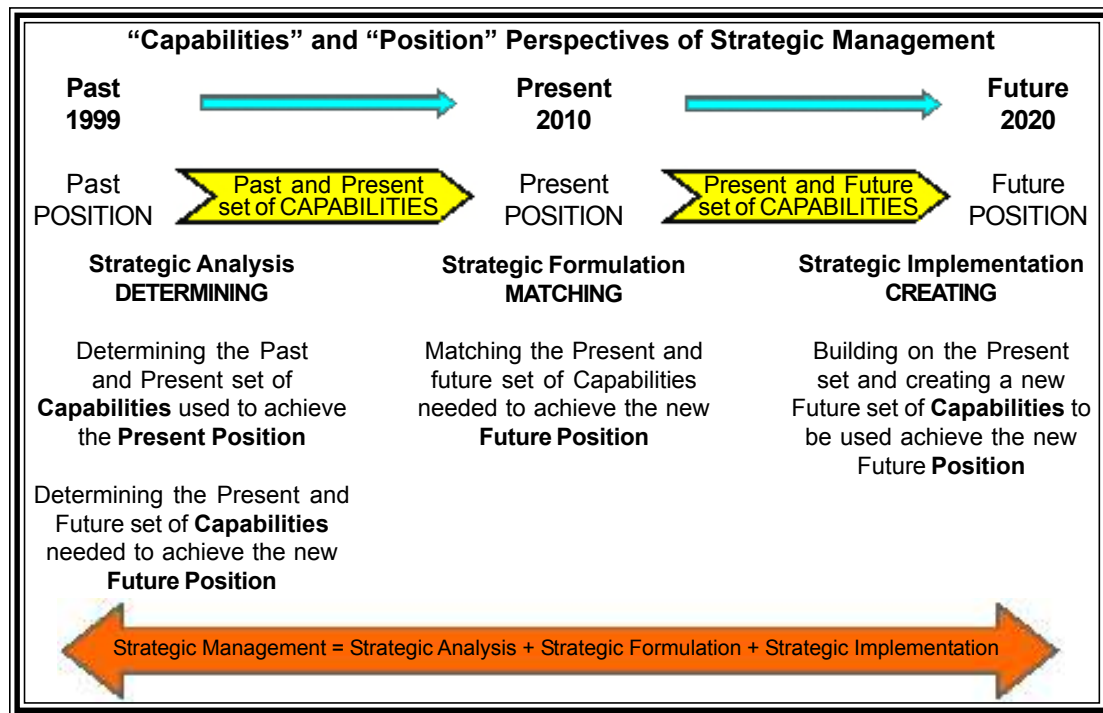
- Street Books. 1988-05. ISBN 0-385-23784-7.
24. Treacy, M. and Wiersema, F. (1993); Customer Intimacy and other Value Disciplines, *Harvard Business Review*, January - February 1993 pp. 83 - 93 .
 25. Walsh, P.R. (2005); Dealing with the uncertainties of environmental change by adding scenario planning to the strategy reformulation equation, *Management Decision*, Vol. 43. No. 1 pp. 113 - 122.
 26. Wilk, E.O. and Fensterseifer, J.E. (2003); Use of Resource-based view in industrial cluster analysis, *International Journal of Industrial and Production Management*, Vol. 23 No. 9 pp. 995 - 1009.
 27. Yin, C.C., Kwok, H.N. and Mo, C.M. (2002); Economic considerations in education policy making: a simplified framework, *The International Journal of education Management*, 16/1, 2002, pp. 18 - 39.
 28. Zemsky, R., Massy, W. F. and Oedel, P. (1993); *On Reversing the Ratchet*. Change, May-June 1993 pp. 56-62.

Chapter 5

Strategic Formulation for the HEI or School

Objectives of the Chapter

- To understand what strategic formulation is within the “capabilities and position” perspectives.
- To understand what strategy, and the levels of strategy, are about.
- To understand the different types of strategy that exist in business and that can be adapted for an HEI or school.
- To understand how to develop, evaluate and select strategies using the TOWS Matrix.



5.1 Strategic Formulation

Once the HEI or school has developed its Strategic SWOT and identified the strategic issues facing it in terms of its future prospects and position based on its capabilities and capacities, two immediate things then to be done. These are as follows:

- To review its existing strategic direction that was crafted from the past (i.e. 1999) up to its present achieved position as of 2010. The key question now is “Should the HEI or school review and revise its strategic direction in terms of its vision, mission, goals and objectives?” within the context of the conducted internal and external environment analyses and based on the Strategic SWOT and immediate strategic issues. It is important

to carry out a review here as the HEI or school is making plans for the next ten years based on the future position that it envisages reaching in 2020 or, in other words, its staked out position, as well as the future capabilities and capacities it needs to create in order to achieve this future position.

- ii. To identify strategies in terms of “what to do” (the organizational strategy) and “how to do it” (the necessary competitive or business strategy). The new set of strategies calls for improving or strengthening its existing set of capabilities and capacities, as well as building new ones.

Figure 5.1: Matching the SWOT “Capabilities - SW” and “Position - OT” TOWS



The main mechanism used in this book is to identify a set of capabilities and capacities, which are the institution’s Strengths (S) and Weaknesses (W) in achieving its future staked-out position, based on Opportunities (O) that the HEI or school can capitalize on, and Threats (T) that might affect its future (see Figure 5.1). This is the Strategic SWOT derived from the internal and external environment analyses.

Figure 5.2: Formulation of the Vision and Mission of a HEI using the TOWS Matrix

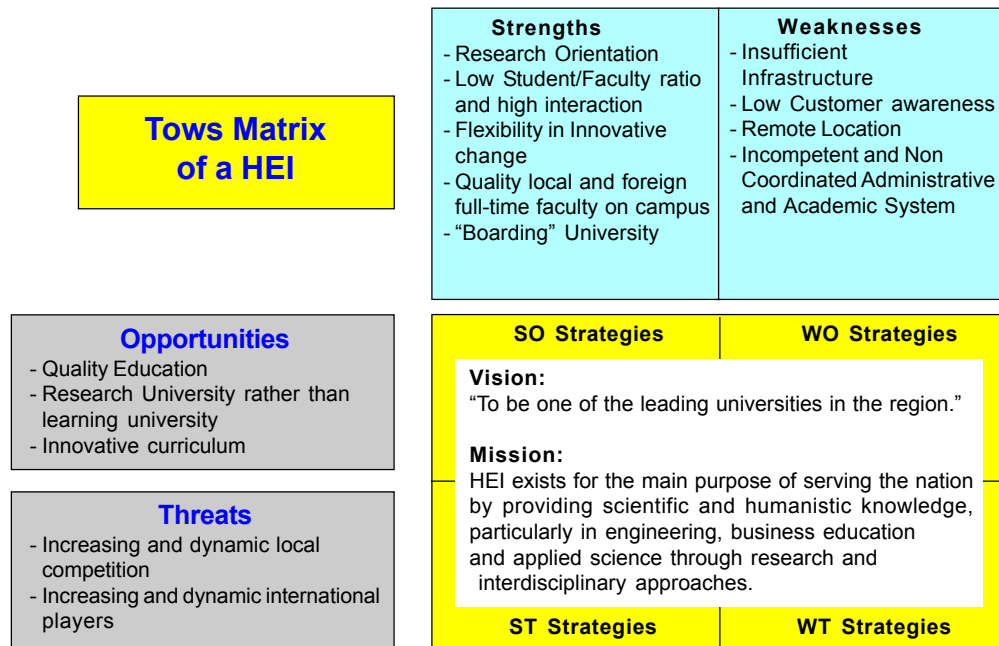
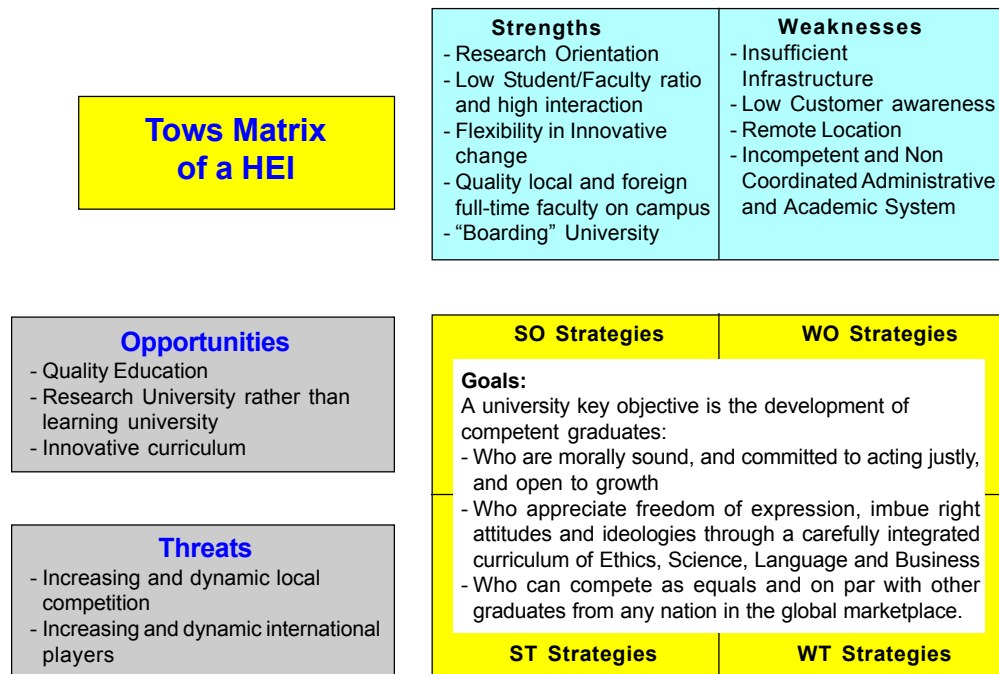


Figure 5.3: Formulation of Strategic Goals of a HEI using the TOWS Matrix



Thus, the new vision and mission should be created based on the Strategic SWOT in order for the institution to prepare itself more effectively because it is based on an understanding of the interplay of both the internal and external factors affecting its operational environment into 2020. An illustration of this is shown in Figures 5.2 and 5.3.

Figure 5.4: Formulation of Strategies of a HEI using the TOWS Matrix

<p style="text-align: center;">Tows Matrix of a HEI</p>	<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> - Research Orientation - Low Student/Faculty ratio and high interaction - Flexibility in Innovative change - Quality local and foreign full-time faculty on campus - “Boarding” University 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> - Insufficient Infrastructure - Low Customer awareness - Remote Location - Incompetent and Non Coordinated Administrative and Academic System
	<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> - Quality Education - Research University rather than learning university - Innovative curriculum 	<p style="text-align: center;">SO Strategies</p> <p>“Research based and Learning University leading to Academic Excellence”</p>
<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> - Increasing and dynamic local competition - Increasing and dynamic international players 	<p style="text-align: center;">ST Strategies</p> <p>“Develop Research think-tank to contribute to social development leading to Academic Excellence”</p>	<p style="text-align: center;">WO Strategies</p> <p>“Develop infrastructure to enhance conducive learning environment towards Academic Excellence”</p> <p style="text-align: center;">WT Strategies</p> <p>“Development academic and service competencies leading to Academic Excellence”</p>

Using a TOWS matrix, as shown in Figure 5.1 (Wehrich, 1982), an institution can map out its vision and mission based on the Strategic SWOT, as shown in Figure 5.2. The HEI or school can also use the same matrix to identify its strategic goals (see Figure 5.3) and its strategies, as shown in Figure 5.4.

Based on the use of the TOWS, it should be noted that the strategies here are based on matching the SW to the OT in order to identify the organizational strategies. As is discussed later, there may be many strategies and so the institution should define a key theme in order to devise a singular strategic direction for the whole HEI or school. As there may be many competitive strategies to address the SO, WO, ST and WT, in order to ensure that these support the entire HEI or school, a strategic theme that addresses and aligns them all is critical to avoid these competitive strategies being overlooked, thus failing to support the overall vision and mission of the HEI or school. An illustration of the use of a strategic theme, as shown in Figure 5.4, is the use of “Academic Excellence” to align the SO, WO, ST and WT strategies.

One argument is that the world around us changes so quickly that, by the time strategies have been devised and implemented, new ones are needed. Recognizing such changes is therefore even more important so that the institution knows “what to do” and “how to do it” rather than

doing nothing, groping in the dark, dealing with organizational mess in a haphazard fashion, or simply leaving everything to the will of higher powers. This book still recognizes the need for short- and longer-term strategies and adheres to the notion that such strategies should be well developed. The trick is to find something appropriate rather than just ignoring it.

Thus, the following sections deal with the existing literature and widely accepted approaches in the development and selection of strategies at corporate, business and operational levels.

5.2 Corporate and Business Strategies

Once the Strategic SWOT and the strategic issues have been identified from the Strategic Analysis, the next step is to formulate the strategies themselves. From the relevant management literature, the development of these strategies calls for defining courses of action at the following three levels:

- ***Organizational Strategy of “what to do”:*** This constitutes the main directional strategies looking into the future of 2020 in order to achieve the staked-out “position” that the HEI or school envisioned. In deciding “what to do”, there are three main choices: 1) growing or expanding; 2) maintaining the existing position; and 3) getting out of the education industry. If the HEI decides to grow, then it has to decide “how to grow”.
- ***Competitive Strategy of “how to do”:*** This means that, once the HEI or school has decided to grow, it has to decide on “how to grow” or, more technically, how to compete in order to grow, as noted in the options or choices that the HEI or school can select from. Figure 5.7 shows a summary of the strategies that most strategic management literature would discuss; these are mostly competitive strategies as they are ways that a HEI or school might select in order to move from 2010 to 2020 and achieve its envisioned “position”. However, it should be noted that these strategies were developed for profit-oriented businesses and so must be adapted within the context of the education industry.
- ***Operational Strategies:*** These strategies define the detail of the “how to compete” for all the operational or functional units in order to compete with other education products.

These three levels of strategy can be summarized as follows:

- **Corporate or Organization level Strategies:** the main directional strategies for the whole HEI or school in order to define what and how it wants to achieve its vision, mission, goals and objectives.
- **Business or Competitive level Strategies:** the strategies at business unit level or the key strategies of the education product group. These must be aligned to the

corporate- or organization-level strategies; they define the competitive strategies of what and how to compete in a specific market.

- **Functional level Strategies:** the main operational strategies in support of the business level or competitive strategies that are to be implemented and achieved by all the key functional areas aligned to the business and the corporate strategies.

5.3 What is a Corporate or Organizational level Strategy?

Corporate or organizational level strategies detail actions that are to be taken in order to gain a competitive advantage by selecting and managing a mix of businesses competing in several industries or product markets. They are concerned with what businesses the HEI or school should be in and how the HEI or school should manage its group of businesses.

Corporate or organizational strategies are important to diversified firms because developing and implementing multi-business strategies is necessary for the effective utilization of excess resources, capabilities and core competencies that have value across multiple businesses (Ireland et al., 1987, pp. 469 - 486). In the final analysis, the value of a corporate or organizational strategy is ultimately determined by the degree to which the businesses in the portfolio are worth more under the management of the company than they would be under any other ownership.

The primary concerns of corporate level strategy are:

- What businesses should the firm be in?
- How should the corporate office manage its group of businesses?
- How can the corporation as a whole add up to more than the sum of its business parts?

Figure 5.5: Corporate Directional Strategies

GROWTH	STABILITY	RETRENCHMENT
Concentration Vertical Growth Horizontal Growth Diversification Concentric Conglomerate	Pause/Proceed with Caution No Change Profit	Turnaround Captive Company Sell-Out/Divestment Bankruptcy/Liquidation

Source: Wheelen and Hunger (2004); Strategic Management and Business Policy, 9th Edition, 2004, Pearson Prentice Hall. pp. 138.

Normally, the first set of strategies to be developed is the corporate strategy and, as indicated in Figure 5.5, there are three main ways in which the HEI or school can position its future. It can decide to:

- Grow or expand its present education products or services.
- Remain stable by maintaining a status quo and wait out for a more timely opportunity or stabilize its existing business after a period of rapid growth by consolidating its resources and operations.
- Turn around a non-profitable operation, sell out part or the whole of the business, or only divest certain non-core groups or non-profitable units.

Some of the possible directional strategies for each of the main set of corporate or organizational strategies are:

Staying in the same business: (This can be achieved through growth in the same business or by stabilizing its existing business through:

- Concentration – Product or market development
- Vertical Integration – Forward or backward
- Acquisition of or merger with a competitor
- Low-cost leadership, differentiation, or focus
- Strategic alliances, including joint ventures

Retrenchment through exiting the business:

- Retrenchment and turnaround (including bankruptcy)
- Harvest or be acquired
- Liquidate (including bankruptcy)

Grow through entering another business:

- Diversification through acquisition (a related or unrelated business)
- Internal diversification.

5.4 Five Competitive Strategies

There are countless variations in the competitive strategies that a HEI or school might employ, mainly because the strategic approach of each HEI or school entails devising custom-designed actions to fit its own circumstances (its capabilities and capacities) and industry. The biggest and most important differences among competitive strategies come down to:

- a. Whether the target market of the HEI or school is broad or narrow,
- b. Whether the HEI or school is pursuing competitive advantage linked to low costs or product differentiation.

Five distinct competitive strategy approaches (see Figure 5.6) stand out:

- **A low-cost provider strategy:** This appeals to a broad spectrum of customers and is based on being the overall lowest-cost provider of a product or service. A HEI or school

has two options for translating a low-cost advantage over rivals into attractive profit performance:

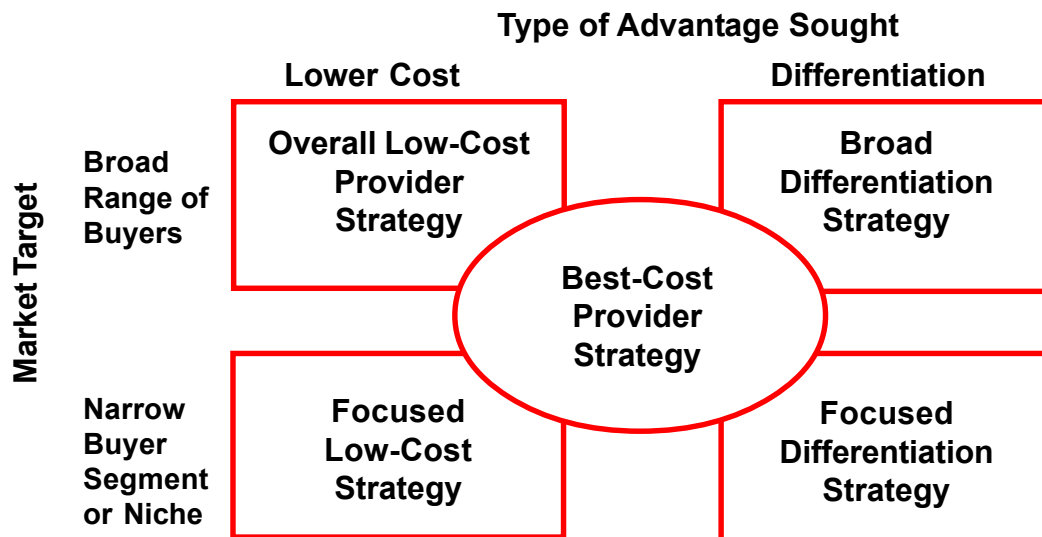
- Option 1: use the lower-cost edge to under-price competitors and attract price-sensitive buyers in great numbers to increase total profits.
 - Option 2: maintain the present price, be content with the current market share, and use the lower-cost edge to earn a higher profit margin on each unit sold.
- **A broad differentiation strategy:** this strategy seeks to differentiate the company's product or service from that of rivals in order to appeal to a broad spectrum of buyers. Differentiation opportunities can exist in activities all along an education industry's value chain and such possibilities include the following:
- Supply chain activities that ultimately spill over to affect the performance or quality of the end product of the HEI or school.
 - Product Research & Development activities that aim to offer improved education product designs and performance features, such as expanded end uses and applications, more frequent first-on-the-market victories, wider variety and choice of education product, added user safety, greater recycling capability, or enhanced environmental protection.
 - Education R&D and technology-related activities that permit custom-order education products, teaching and learning at an efficient cost, and improved quality, reliability and marketability of the education product.
 - Education processes and activities that reduce education products' deficiencies, prevent premature product failure, extend the education product's life, and/or offer better quality education.
 - Outbound logistics and distribution activities that allow for faster delivery and that are more productive to the employment market.
- Offers a **best-cost provider strategy:** This strategy offers customers more value for their money by incorporating education products with good-to-excellent attributes at a lower cost than rivals; the target is to have the lowest (best) costs and prices compared to rivals while offering education products with comparable attributes.
- Best-cost provider strategies aim at giving customers more value for their money. The objective is to deliver superior value to buyers by satisfying their expectations regarding key attributes in terms of quality/service/features/performance and beating their expectations on price while delivering on key education value.
 - A HEI or school can achieve best-cost status from an ability to incorporate attractive attributes at a lower cost than rivals.
 - Best-cost provider strategies stake out a middle ground between pursuing a low-cost advantage and a differentiation advantage, and between appealing to the broader market as a whole and a narrow market niche.
 - From a competitive positioning standpoint, best-cost strategies are a hybrid, balancing a strategic emphasis on low cost against a strategic emphasis on differentiation.

- The market target is value-conscious buyers.
- The competitive advantage of a best-cost provider involves having lower costs than rivals while incorporating good-to-excellent attributes. This puts the company in a position to under-price rivals whose education products have attributes of similar appeal.
- A best-cost provider strategy is very appealing in markets where buyer diversity makes education product differentiation the norm and where many buyers are also sensitive to price and value.

What sets focused strategies apart from low-cost leadership or broad differentiation strategies is that these strategies concentrate attention on a narrow section of the total market. The target segment or niche can be defined by:

- a. Geographic uniqueness,
 - b. Specialized requirements in using the product,
 - c. Special product attributes that appeal only to niche members.
- **A focused or market niche strategy based on lower cost:** concentrates on a narrow buyer segment and attempts to out-compete rivals by serving niche members at a lower cost than these rivals.
 - A focused strategy, based on low costs, aims at securing a competitive advantage by serving buyers in the target market niche at a lower cost and lower price than rival competitors.
 - This strategy is very attractive when a firm can lower costs significantly by limiting its customer base to a well-defined buyer segment.
 - **A focused or market niche strategy based on differentiation:** concentrates on a narrow buyer segment and tries to out-compete rivals by offering niche members customized attributes that meet their needs and requirements better than rivals products.
 - A focused strategy based on differentiation aims at securing a competitive advantage by offering niche members an education product they perceive is better suited to their own unique needs and preferences.
 - Successful use of a focused differentiation strategy depends on the existence of a buyer segment that is looking for special education products or seller capabilities and on a HEI's or school's ability to stand apart from rivals competing in the same target market niche.

Figure 5.6: The Five Generic Competitive Strategies



Source: Adapted from Porter (1980); *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, free Press, Macmillan, 1980 pp. 35 - 40.

As shown in Figure 5.6, the five generic competitive strategies are:

5.4.1 Cost Leadership:

- Low-cost competitive strategy
- Aims at a broad mass market
- Aggressive construction of efficient-scale facilities
- Cost reductions
- Cost minimization

5.4.2 Differentiation:

- Broad mass market
- Unique product or service
- Charges premiums
- Lower customer sensitivity to price

5.4.3 Cost focus:

- Low cost competitive strategy
- Focus on particular buyer group or market
- Niche-focused
- Seeks cost advantage in the target market

5.4.4 Differentiation focus:

- Focuses on particular group or geographic market
- Seeks differentiation in the targeted market segment
- Serves special needs of a narrow target market

5.5 Integration Strategies

A. *Forward Integration*

1. Forward integration involves gaining ownership or increased control over distributors or retailers.
2. An effective means of implementing forward integration is franchising.

B. *Backward Integration*

1. Backward integration is a strategy which seeks ownership or increased control of a firm's suppliers. This strategy can be especially appropriate when a firm's current suppliers are unreliable, too costly, or cannot meet the firm's needs. A potential way here is for the HEI to own high schools and/or a printing house.
2. Some industries in the United States (such as the automotive and aluminum industries though this is not prevalent in higher education) are reducing their historic pursuit of backward integration. Instead of owning their suppliers, companies negotiate with several outside suppliers.
 - a. Outsourcing, whereby companies use outside suppliers, shop around, play one seller against another, and take up the best deal, is becoming widely practiced. This is a means whereby e-learning technologies and storage can be widely used as the technology providers are the experts.
3. Global competition is also spurring firms to reduce the number of their suppliers and to demand higher levels of service and quality from those they keep.

C. *Horizontal Integration*

1. Horizontal integration refers to the strategy of seeking ownership of or gaining increased control over a firm's competitors. One of the most significant trends in strategic management today is the increased use of horizontal integration as a growth strategy. Mergers, acquisitions and takeovers among competitors allow for increased economies of scale and enhanced transfer of resources and competencies.

2. Horizontal integration has become the most-favored growth strategy in many industries. For example, the explosive growth in e-commerce has seen telecommunications firms worldwide frantically merging and pursuing horizontal integration to gain competitiveness.

5.6 Intensive Strategies

A. *Market Penetration*

1. A market-penetration strategy seeks to increase market share for the present products or services in the present markets through greater marketing efforts.
2. Market penetration includes increasing the number of salespersons, increasing advertising expenditure, offering extensive sales promotion items, or increasing publicity.

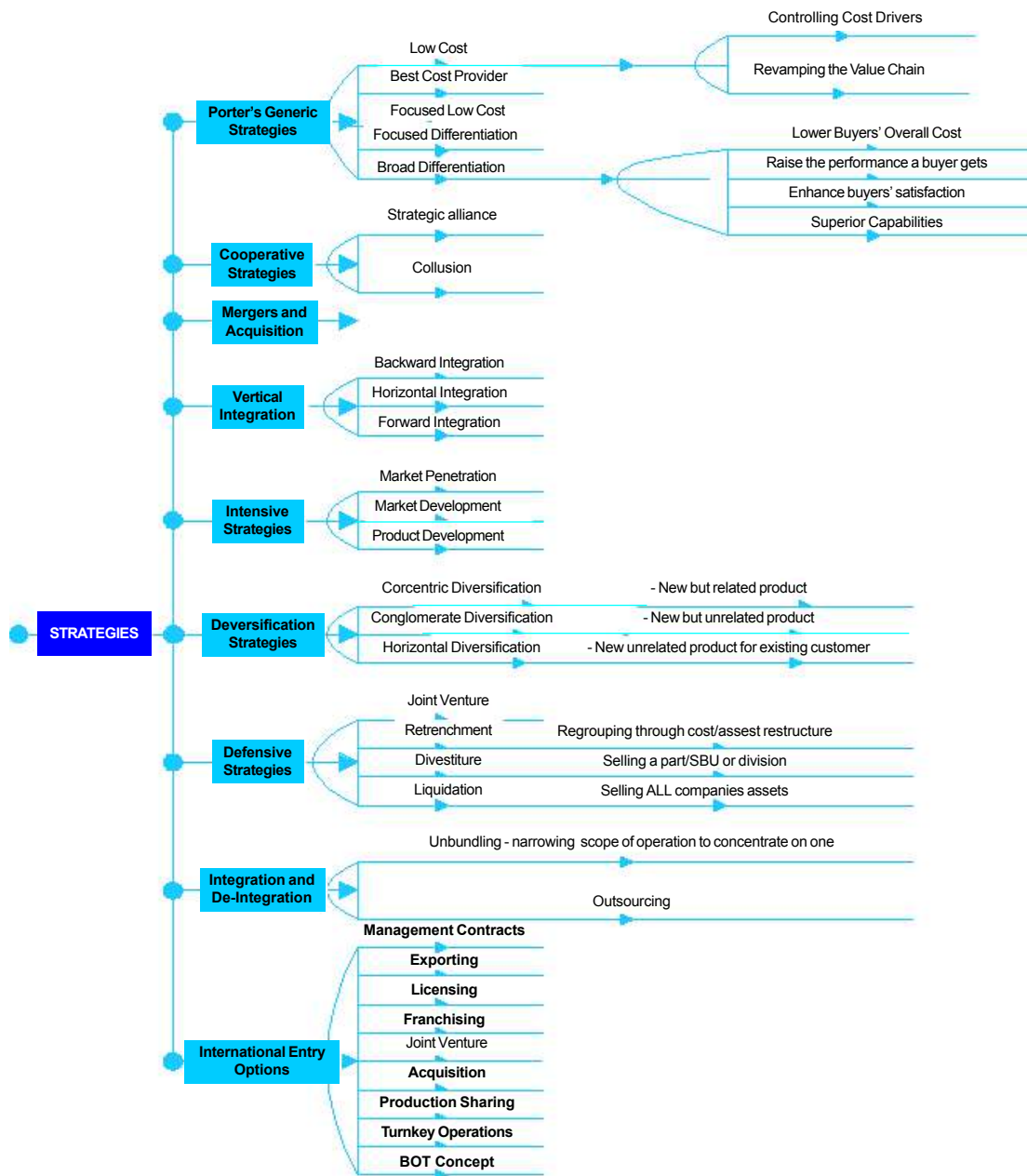
B. *Market Development*

1. Market development involves introducing the present products or services into new geographic areas.
2. The climate for international market development is becoming more favorable. In many industries, such as airlines, it is hard to maintain a competitive edge by staying close to home.

C. *Product Development*

1. Product development is a strategy that seeks increased sales by improving or modifying the firm's present products or services. Product development usually entails large research and development expenditure.

Figure 5.7: Summary of the Main Types of Competitive Strategy



Source: Teay (2007); *A Primer on Strategic Organization Analysis and Planning Model*, 4th Edition 2007, Assumption University Digital Press, Thailand.

5.7 Diversification Strategies

A. *Concentric Diversification*

1. Adding new, but related, products or services is widely called concentric diversification.

B. *Horizontal Diversification*

1. Adding new, unrelated products or services for current customers is called horizontal diversification. This strategy is not as risky as conglomerate diversification because a firm should already be familiar with its present customers.
 - a. Amazon, the huge on-line bookstore, is pursuing horizontal diversification with an aggressive entry into the toys and consumer electronics business.

C. *Conglomerate Diversification*

1. Adding new, unrelated products or services is called conglomerate diversification.
2. Some firms pursue conglomerate diversification based in part on an expectation of profits from breaking up acquired firms and selling divisions piecemeal.
3. General Electric is a classic firm that is highly diversified. GE makes locomotives, light bulbs, power plants and refrigerators; GE also manages more credit cards than American Express and owns more commercial aircraft than American Airlines.

5.8 Defensive Strategies

A. *Retrenchment*

1. Retrenchment occurs when an organization regroups through cost and asset reduction to reverse declining sales and profits.
2. Sometimes called a turnaround or reorganization strategy, retrenchment is designed to fortify an organization's basic distinctive competence.

B. *Divestiture*

1. Selling a division or part of an organization is called divestiture. Divestiture is often used to raise capital for further strategic acquisitions or investments.

2. Divestiture has become a very popular strategy as firms try to focus on their core strengths, lessening their level of diversification. Some divestitures completed in 2000 are given in Table 5-2 in the textbook.

C. *Liquidation*

1. Selling all of a company's assets, in parts, for their tangible worth is called liquidation. Liquidation is recognition of defeat and consequently can be an emotionally difficult strategy.

5.9 Joint Venture and Combination Strategies

A. *Joint Venture*

1. Joint venture is a popular strategy that occurs when two or more companies form a temporary partnership or consortium for the purpose of capitalizing on some opportunity.
2. Joint ventures and cooperative arrangements are being used increasingly because they allow companies to improve communications and networking, to globalize operations, and to minimize risk.
3. Many, if not most, organizations pursue a combination of two or more strategies simultaneously, but a combination strategy can be exceptionally risky if carried too far. No organization can afford to pursue all the strategies that might benefit the firm. Difficult decisions must be made and priorities must be established. Organizations, like individuals, have limited resources. Both organizations and individuals must choose from among alternative strategies and avoid incurring excessive indebtedness that affects its position.

5.10 Mergers

A. *Acquisitions and Mergers*

1. Acquisitions and mergers are two commonly used ways to pursue strategies.
 - a. An acquisition occurs when a large organization purchases or acquires a smaller firm, or vice versa.
 - b. A merger occurs when two organizations of about equal size unite to form one enterprise.

There are many reasons for mergers and acquisitions, including the following:

- a. To provide improved capacity utilization
- b. To make better use of an existing sales force
- c. To reduce managerial staff
- d. To gain economies of scale
- e. To smooth out seasonal trends in sales
- f. To gain access to new suppliers, distributors, customers, products and creditors
- g. To gain new technology
- h. To reduce tax obligations

B. *Leveraged Buyouts (LBOs)*

1. A leveraged buyout (LBO) occurs when a corporation's shareholders are bought out (hence buyout) by the company's management and other private investors using borrowed funds (hence leveraged).
2. Besides trying to avoid a hostile takeover, other reasons for initiating an LBO are when senior management decides that particular divisions do not fit into the overall corporate strategy, or that they must be sold to raise cash, or that an attractive offer price has been put forward. A LBO makes a corporation private.

5.11 Mergers, Acquisitions and Takeovers: What are the Differences?

A ***merger*** is a transaction where two firms agree to integrate their operations on a relatively co-equal basis because they have resources and capabilities that together may create a stronger competitive advantage.

An ***acquisition*** is a transaction where a firm buys a controlling or 100% interest in another firm with the intent of using its core competence by making the acquired firm a subsidiary business within its own portfolio.

While most mergers represent friendly agreements between the two firms, acquisitions can sometimes be classified as unfriendly takeovers. A ***takeover*** is an acquisition, not normally a merger, as the target firm did not solicit the bid of the acquiring firm and often resists the acquisition.

Horizontal Acquisitions: When a competitor in the same industry is acquired, a firm has engaged in a ***horizontal acquisition***. Horizontal acquisitions increase a firm's market power by exploiting cost-based and revenue-based synergies. Research suggests that horizontal acquisitions of firms with similar characteristics result in higher performance than when firms with dissimilar characteristics combine their operations. Examples of important

similar characteristics include strategy, managerial styles and resource allocation patterns.

Vertical Acquisitions: A *vertical acquisition* has occurred when a firm acquires a supplier or distributor which is positioned either backward or forward in the firm's cost or activity value-chain.

Related Acquisitions: When a target firm in a highly related industry is acquired, the firm has made a *related acquisition*.

Cross-Border Acquisitions: Acquisitions between companies with headquarters in different countries are called *cross-border acquisitions*.

Reasons for Acquisitions and Problems in Achieving Success

The seven reasons that firms (and managers) implement acquisition strategies are to:

- increase market power
- overcome entry barriers
- reduce or avoid the cost of new product development
- increase speed to market
- attract lower risk compared to developing new products
- increase diversification
- avoid excessive competition

The seven reasons for the poor performance of acquisitions or problems faced in attempts to achieve success are:

- integration difficulties
- inadequate evaluation of target
- large or extraordinary debt
- inability to achieve synergy
- too much diversification
- managers overly focused on acquisitions
- too large

5.12 Strategic Alternatives Formulation, Evaluation and Recommendation (SAFER) Framework

After having conducted an overall analysis of both the internal and external environments, the organization has achieved two main outcomes as follows:

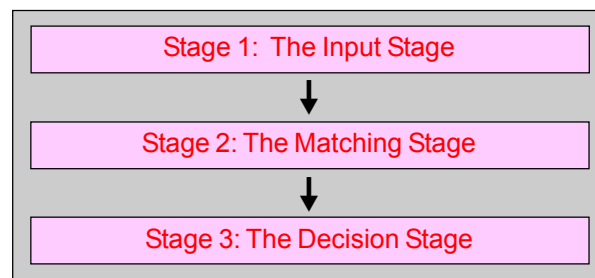
1. The Strategic SWOT that identifies all the KEY and CRITICAL strengths, weaknesses, opportunities and threats facing the future of the organization, and

2. The Strategic Issues facing the organization in the next five to ten years. The strategic issues represent the:
 - a) Key decisions facing the organization that must be made in order to achieve its future position and objectives;
 - b) Key problems facing the organization that it must address in order to develop its capabilities and competencies to achieve its future staked-out position.

Based on the key issues identified, the organization has to map out its available strategic options in order to select those that are most appropriate for its survival in the industry. To ensure that what is selected is based on its analysis and that the selected strategies are appropriate to achieve its future objectives based on existing and projected, new resources, the Strategic Alternatives Formulation, Evaluation and Recommendation (SAFER) framework is proposed to link the two phases of strategic analysis and strategic formulation; these lead to the third and final phase of strategic implementation. The SAFER framework is designed to formulate, evaluate and recommend an appropriate set of strategies that the organization can use to pursue its staked-out position in the industry.

There are three main stages, as shown in Figure 5.8, with the main inputs coming from the internal and external environmental analyses. Based on these analyses, an attempt is made to match the internal environmental outcomes (those that normally define the CAPABILITIES of the organization) with the outcomes from the external environmental analysis (this generally defines a POSITION that the organization seeks to achieve in the industry).

Figure 5.8: Stages in SAFER Framework



Source: Adapted from David (2005): *Strategic Management: Concepts and Cases*, Tenth Edition, Prentice Hall, Pearson, 2005, pp 14 and 50 - 63.

The three main stages of the SAFER framework are discussed briefly below:

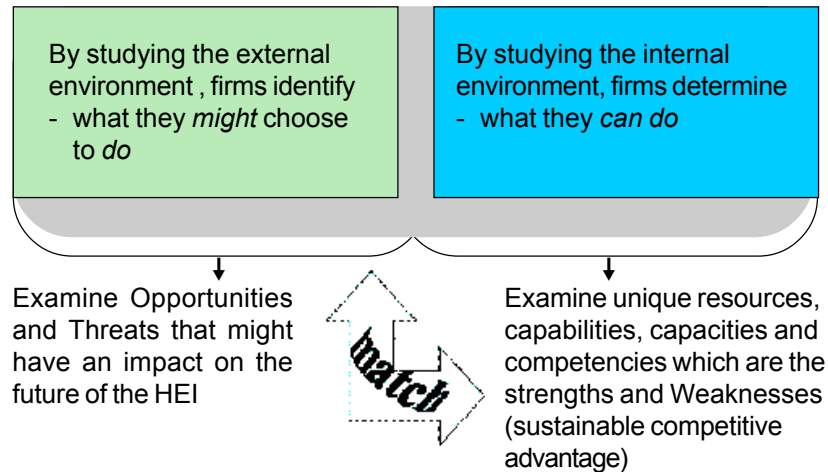
Stage 1:

In the **Input Stage of Stage 1**, the outcomes from the internal and external environmental analyses are used. The key inputs actually come from the **Strategic Environment Factors Analysis Summary (SEFAS) in the Strategic SWOT**; this is discussed in Chapter 4.

Stage 2:

In the **Matching Stage of Stage 2**, once the Strategic SWOT has been identified, the key components of the SW and the WT are matched to ensure that the formulated strategies are based on the capabilities that are being used or created to capitalize on the opportunities. At the same time, the weaknesses and threats must be accounted for and addressed (Figure 5.9).

Figure 5.9: Matching the “Capabilities - SW” to the “Position - OT”



Source: Teay (2007); *A Primer on Strategic Organization Analysis and Planning Model*, 4th Edition 2007, Assumption University Digital Press, Thailand.

In developing strategies for the HEI or school, using the TOWS Matrix, as shown in Figure 5.10, the steps are:

- List the firm's key external opportunities;
- List the firm's key external threats;
- List the firm's key internal strengths;
- List the firm's key internal weaknesses;
- Match internal strengths with external opportunities and record the resultant SO strategies;
- Match internal weaknesses with external opportunities and record the resultant WO strategies;
- Match internal strengths with external threats and record the resultant ST strategies;
- Match internal weaknesses with external threats and record the resultant WT strategies.

Figure 5.10: Formulation of Strategies using the TOWS Matrix

EXTERNAL FACTORS (EFAS)	INTERNAL FACTORS (IFAS)	Strengths (S) List 5-10 <i>internal</i> strengths here	Weaknesses (W) List 5-10 <i>internal</i> weaknesses here
	Opportunities (O) List 5-10 <i>external</i> opportunities here	SO Strategies Generate strategies here that use strengths to take advantage of opportunities	WO Strategies Generate strategies here that take advantage of opportunities by overcoming weaknesses
	Threats (T) List 5-10 <i>external</i> opportunities here	ST Strategies Generate strategies here that use strengths to avoid threats	WT Strategies Generate strategies here that minimize weaknesses and avoid threats

Source: Weihrich (1982); The TOWS Matrix - A Tool for Situational Analysis, *Long Range Planning*, April 1982, pp. 60.

Stage 3: In the **Decision Stage of Stage 3**, once the strategies have been formulated, identified or developed, they must then be evaluated to select those that are most appropriate for the organization. The selection is important as the organization normally does not have the resources to implement all the strategies. Thus, it must select those that are most feasible, practical and appropriate based on the circumstances of the organization. In this case, the Quantitative Strategic Planning Matrix (QSPM) approach can be used. This is an analytical technique designed to determine the relative attractiveness of feasible alternative actions.

The Quantitative Strategic Planning Matrix (QSPM) is a tool for the objective evaluation of alternative strategies, which requires good intuitive judgment. It is based on crucial external and internal success factors, as shown in Figure 5.11. (Note that the organization can select the Critical Success Factors as the internal and external criteria for evaluation.)

Figure 5.11: QSPM Matrix Evaluations

Key External Factors	Weight	Rating	Strategy 1	Rating	Strategy 2
Economy	.06	4	.24	4	.24
Political/Legal/Governmental	.15	5	.75	3	.45
Market needs	.09	3	.27	1	.09
Social Cultural trends	.10	2	.2	3	.3
Stakeholders' needs	.09	4	.36	2	.18
Competitiveness	.15	1	.15	4	.6
Key Internal Factors					
Curricula	.04	4	.16	4	.16
Teaching Learning Outcomes	.05	5	.25	5	.25
Learning Resources	.01	3	.03	2	.02
Teaching Faculty	.10	4	.4	3	.3
Student Support Services	.01	5	.05	2	.02
Community and Relationships	.05	1	.05	1	.05
Research and Development	.10	3	.3	1	.10
Attractiveness Score	1		3.21		2.76

Source: Adapted from David (2005); *Strategic Management: Concepts and Cases*, Tenth Edition, Prentice Hall, Pearson, 2005, pp 14 and 50 - 63.

Key steps of the QSPM evaluation, as shown in Figure 5.11, are:

- **Step 1:** List the firm's key and strategic external opportunities and threats; list the firm's key and strategic internal strengths and weaknesses.
- **Step 2:** Assign weights to each external and internal critical success factor.
- **Step 3:** Examine the Stage 2 (matching) matrices and identify alternative strategies that the organization should consider implementing.
- **Step 4:** Determine the Attractiveness Scores (AS).
- **Step 5:** Compute the total Attractiveness Scores.
- **Step 6:** Compute the Sum Total Attractiveness Score.

Based on the steps discussed above, Strategy 1 is selected since the sum of the attractiveness score is more than for Strategy 2.

The key tests used to support the strategic evaluation above are:

Test one: How ATTRACTIVE is the education market opportunity?

- How BIG is the overall education market?
- How FAST will it grow?
- How INTENSE will competition become?

Test Two: How SUSTAINABLE is the competitive advantage?

- What target market segments will be served by the HEI or school?

- What advantages can be achieved in these targeted segments?
- What are the outcomes of these advantages?
- How long can they be sustained?

Test Three: What are the PROSPECTS for successful implementation?

- **FEASIBILITY:** Does the institution have the necessary skills and resources in terms of capital, human (knowledge, skills and capabilities), information and technology: CHIT? If not, can they be obtained in time?
- **ACCEPTABILITY:** Is the proposed strategy acceptable to and understood by the internal stakeholders of the personnel and staff, and the external stakeholders of the customers, shareholders, suppliers, interest groups and regulatory agencies?
- **CONSISTENCY:** Does the strategy hang together?
- **SUPPORTABILITY:** Do the key implementers understand the premises and the strategy? Are they committed to it?
- **SUITABILITY:** Does the strategy has a strategic fit, organizational fit, cultural fit, resource fit and technological fit with the existing modus operandi of the HEI or school? Does the plan address the major issues?

Test Four: Are the RISKS acceptable?

- How vulnerable are the forecast results if pivotal assumptions are wrong or critical tasks are not accomplished?
- What actions can be taken to minimize the exposure to the risks?
- How robust is the strategy?

Test Five: Will the forecast FINANCIAL RESULTS be achieved and increase shareholder value?

- How sensitive are the results to changes in the forecasts?
- Has the HEI or school considered the risks and returns involved?

In short, the main tests of a winning strategy are:

- ***GOODNESS OF FIT TEST***
→ How well is the strategy matched to the situation of the HEI or school?
- ***COMPETITIVE ADVANTAGE TEST***
→ Does the strategy lead to sustainable competitive advantage?
- ***PERFORMANCE TEST***
→ Does the strategy boost performance?

Summary

Strategic Formulation means developing, evaluating and selecting a set of specific strategies that the HEI or school will implement to achieve the future position it desires in the education industry. As noted, the achievement of the staked-out position is based on a set of capabilities which means that the strategic development is based on matching the capabilities and capacities (i.e. the Strengths and Weaknesses (SW)) to the envisioned position (the Opportunities and Threats (OT)) from the Strategic SWOT.

This inevitably means that developing the strategies involves matching the SW and the OT based on the TOWS matrix; this matrix can also be used to review and revise the future Vision, Mission and Strategic Goals.

This chapter also summarizes the main set of strategies found in most literature on strategic management, as well as offering a discussion of Porter's five generic strategies which are still used as the basis for most adapted versions of strategies based on low cost or differentiation. Once the strategies have been developed, the SAFER approach is used to provide a set of guidelines to match, evaluate and select those which arrive at an appropriate strategic set using the five tests.

Reference

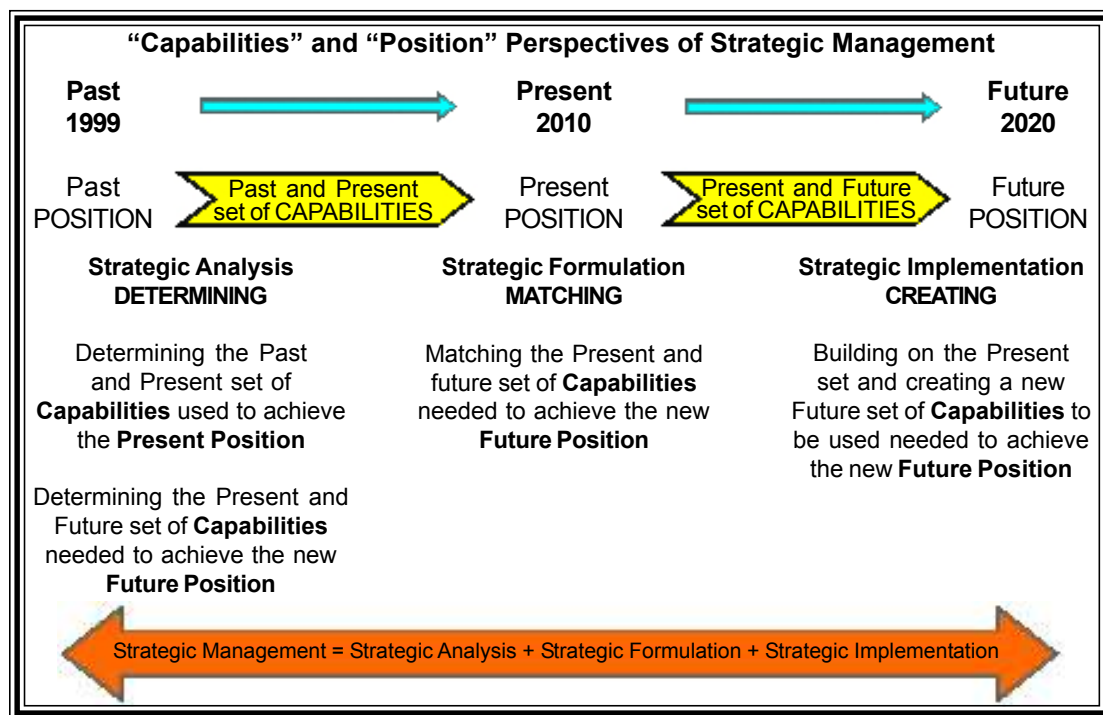
1. David, F. R. (2005); *Strategic Management: Concepts and Cases*, Tenth Edition, Prentice Hall, Pearson, 2005, pp 14 and 50 - 63.
2. Ireland, R.D., Hitt, M.A., Bettis, R.A. and de Porres, D.A. (1987); Strategy formulation processes: Differences in perceptions of strengths and weaknesses indicators and environmental uncertainty by managerial level. *Strategic Management Journal*, Sept - Oct 1987, Vol. 8. No. 5 pp. 469-486.
3. Porter, M. E. (1980); *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, Free Press, Macmillan, 1980 pp. 35 - 40.
4. Teay, S. (2007); *A Primer on Strategic Organization Analysis and Planning Model*, 4th Edition 2007, Assumption University Digital Press, Thailand.
5. Wheelen, T. L. and Hunger. D. J. (2004); *Strategic Management and Business Policy*, 9th Edition, 2004, Pearson Prentice Hall. pp. 138.
6. Weihrich, H. (1982); The TOWS Matrix - A Tool for Situational Analysis, *Long Range Planning*, April 1982, pp. 60.

Chapter 6

Actioning the Strategic Plan through Strategic Mapping

Objectives of the Chapter

- To understand the Strategic Implementation Process based on the “capabilities and position” perspectives.
- To understand the issues concerning the conventional approach to Strategic Implementation.
- To propose the use of the Balanced Scorecard Approach as an approach for Strategic Implementation.
- To understand how to develop the Academic and Administrative Strategic Map of the HEI or school, the Strategic Goals and Objectives, and Performance measures.
- To understand how to develop action plans based on the Strategic Mapping of the HEI or school.



6.1 Introduction

The Strategic Implementation is the most difficult and tedious part of the strategic management process; the key issue is the realization of what is planned. Planning through strategic analysis and strategic formulation is easier than the implementation. The difficult part is not in the acquisition of the resources to implement the strategic plan but in the creation of the capabilities and capacities, the competencies that are critical to the success of the HEI or

school. The bottom line is that success is dependent, not on the acquisition of the resources, but on the capabilities and capacities in utilizing these resources and the systems or educational processes that add value to that which the HEI or school proposes to its stakeholders through its strategic plan.

So, using the same “capabilities and position” perspective as in this book, the key issue in the strategic implementation is the creation of the capabilities and capacities, or, in other words, the set of competencies. These competencies are the very foundation of the strategic human, information and organization capital that will affect the success of the HEI or school. The stronger this strategic capital, the better the creation and delivery of the educational values of the HEI or school in terms of what it proposes to do, as communicated to the stakeholders in its education value proposal.

At the very onset, the HEI or school should map out its strategic direction and the strategic plan should define the following:

- **Vision** – The vision defines “**what we WANT to be**”; it is a dream that the HEI or school, together with its academic or administrative units, has of itself in terms of the POSITION where it wants to be.
- **Mission** – The mission defines “**what we CAN be**” or “**why the HEI or School exists**”. In order to achieve the dream or position it desires, it needs to define a set of CAPABILITIES of what it can do to achieve that position.
- **Goals** – Goals are specific accomplishments that will define in broad and general terms “**what we want to achieve and can achieve**”. This represents the definition of a set of broad and achievable targets that result in the achievement of its vision and mission in order to reach the position that the HEI or school intends to stake out.
- **Objectives** – Objectives are specific accomplishments that are usually “milestones” along the way; they are designed to measure the achievement of the goals and the mission of the HEI or school when implementing the strategies. The objectives define these achievements in terms of “**what are the measures of the achievements?**” The measures and targets should be challenging, achievable and measurable and within a set time-frame. **Objectives are the end results of a planned project or activity**; they must be SMARTER: Specific, Measurable, Acceptable, Realistic, with in a Time-frame, Extending and Rewarding).
- **Strategies** – Strategies define the “**what to do**” and “**how to do it**”. The strategies of “what to do” concern whether to grow, maintain the present position or exit. Once the HEI or school has decided to grow, for example, then it must decide “how to do it” or how to grow, as there are various ways of doing this.

The 5-year, 10-year or 20-year Strategic Plan of the HEI or school should aim to find answers to the following questions:

- i. Where is the HEI or school now (its current POSITION as of 2010), based on its current performance using its past and present capabilities and capacities?
- ii. What does the HEI or school have to work with (i.e. its current CAPABILITIES and CAPACITIES or, in totality, the HEI or school's COMPETENCIES) as of 2010 to accomplish its achievements from 1990 to 2010?
- iii. Where does the HEI or school want to be (i.e. its new POSITION) in 2020?
- iv. How does the HEI or school get there? In other words, what are the new CAPABILITIES and CAPACITIES that need to be created or built in order to achieve the new POSITION in 2020?

The Action Plan, an annual developmental plan, is the operationalization of the strategic plan. This calls for the strategic plan to be broken down into stages that need to be achieved on an annual basis over the next ten years. It should be noted that the annual development plan is built upon the action plan of the previous year; this needs to be assessed in terms of its performance and achievements, normally measured through its KPIs.

Action planning typically includes deciding who is going to do what, by when, and in what order so that the academic or administrative unit will reach its strategic goals. The design and implementation of the action plan is dependent on the nature and needs of the academic or administrative unit. Action planning may sometimes seem detailed and tedious compared to strategic planning which may seem more creative in nature. As a result, action planning is too often ignored, leaving the results of earlier planning stages rather like "castles in the air". As such, they are useless philosophical statements with no grounding in the day-to-day realities of the academic or administrative unit. As with the OYPB (One-Year Plan and Budget), action plans are the day-to-day projects and activities that support and aid the achievement of key activities of the strategic plan over the duration of longer term periods. The action plan normally answers the key question: "How do we get there?" (i.e. it is the new CAPABILITIES and CAPACITIES which are needed to achieve the new POSITION in 2020).

6.2 Actioning the Strategic Plan

6.2.1 Conventional approach to strategic implementation

Most of the existing literature concerning Strategic Implementation uses the conventional approach to define the following when implementing strategies. In the implementation of the strategic plan, Fogg (1999) looks at it from the perspectives of strategic changes process in the organization whereby the strategic plan is a pre-condition for change. He identified the phases of strategic change process in the organization as: 1) Identifying changes,

2) Unfreezing/Muddling, 3) Structural Changes and 4) Continuous Improvements. In these 4 phases of strategic changes process, he identified some of keys to successful implementation as:

- Developing an accountability system
- Turn strategic priority issues into assigned measurable action plans
- Embed departmental planning
- Negotiate individual accountability
- Change organizational structure - fast
- Change the people - fast
- Foster creative leadership and mental toughness
- Remove resistance
- Use teams (appropriately)
- Define the future culture
- Develop capability and capacity
- Develop key measures of performance
- Empower execution
- Select, train and develop for the future - now
- Review performance
- Take proactive actions for improvements
- Reward strategic results

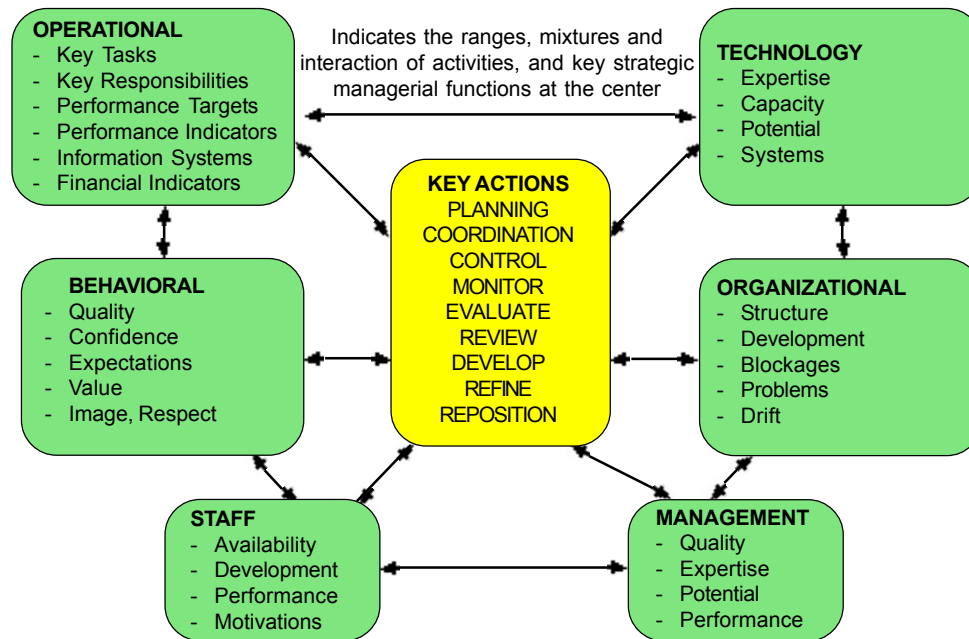
The approach of Fogg (1999) is also echoed in some of the key activities (Figure 6.1) which underpins these existing and conventional approaches in strategic implementation. In these conventional approaches, it will be noted that there are three immediate issues that need to be dealt with. These are as follows:

1. ***The Organizational Structure of the HEI or School:*** Theoretically, all units should move in the same strategic direction, as planned through their stated vision, mission, goals and objectives. In reality, this is seldom the case. In a typical HEI or school, the colleges, and academic and administrative units are structured through a hierarchical mechanism that brings about an academic and administrative divide where one side is not supportive of the other. This increases the likelihood of a political fiefdom where individuals protect their own domain and are motivated by self-interest at the expense of others.
2. ***Inter-linkages of Independent Functional Activities:*** In practice, since units are more politically protective of their own domain, performance measures in terms of key performance indicators are normally developed independent of others. This often results in a need to compete in order to outperform others, rather than to work as a whole to fulfill one mission and a set of unified goals and objectives. This, in turn, leads to the management of parts (e.g. units, divisions or departments) rather than the management of the whole (i.e. the institution as one whole entity). This undermines achieving a unified

approach to moving in the same strategic direction to arrive at the staked-out position that the HEI or school aims to reach.

3. **Cause-effect Linkages between Sub-entities in the HEI or School:** If such independence exists, then it does not bode well for cooperative or collaborative endeavors across the different units in the HEI or school. As a result, overall success is undermined as the achievements of other units are subverted. This is based on the premise that the outcome of one unit is the input to another and that they are interdependent.

Figure 6.1: Strategic Implementation Activities



Source: Pettinger (1996); "Introduction to Corporate Strategy", 1996.

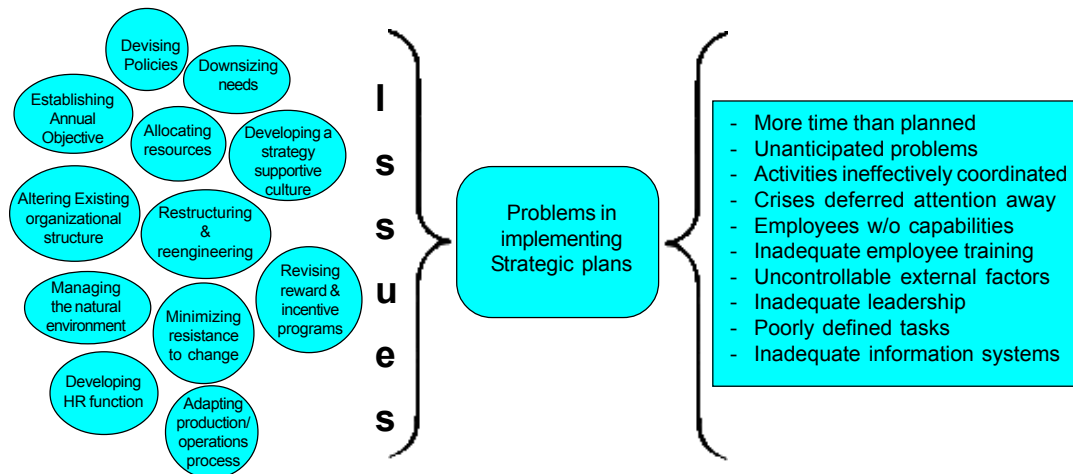
Figure 6.1 above shows that the HEI or school should manage its key actions and activities: (POC3: Plan, Organize, Communicate, Coordinate and Control). This means that, in practice, the HEI or school should manage (as shown in the center box) all the main areas of:

- Operations in the teaching-learning-research community, and all components of the education products and services it offers;
- The behavior of the human and organizational strategic assets;
- The staff in terms of their type and competencies;
- The key functional aspects of running the HEI or school;
- The organizational systems, structures, cultures and infrastructure of the HEI or school;
- The technological aspects of the services and supports of the whole organization.

Theoretically, this depicts the daily life and work of the HEI or school as part of the conventional academic and administrative system. However, in practice, when the operational

domain is encountered (see Figure 6.2), political issues, the competitive nature of individuals, the basic behavioral instincts of human beings and, in the more complex organizational systems, complex issues arise, as can be seen in the everyday operations of a typical HEI or school. Even though everything is strategically planned, operationally, a great deal is still to be done and history has told of untold miseries and failures in the strategic implementation through these conventional activities.

Figure 6.2: Problems Impeding Strategic Implementation



6.2.2 Balanced Scorecard Approach to Strategic Implementation

This book puts forward the Balanced Scorecard (BSC) approach of Kaplan and Norton (1996, 2001, 2004 and 2006) as an alternative to the conventional approach discussed above. In using the BSC approach (Niven, 2002), the authors would like to present a stronger case for its use as the BSC encompasses two fundamental philosophies that are blurred in the structural domains of the conventional approach. It does not mean that the BSC approach solves all human-based issues but it is meant to reduce these by specifying what needs to be done to address the issues identified in the conventional approach. These two fundamental philosophies are:

1. **Management through measurement (Neely, 1999):** It is a widely accepted practice in HEIs or schools that there is a need to monitor and measure the developmental performance of students through stated student learning outcomes. This is to ensure that student performance is better managed over a period of time based on a composite of measures covering the development of knowledge, skills and abilities using different approaches and subject matter. The same holds true for the HEI or school in that the performance of academic and administrative units should be monitored and assessed to ensure that they achieve the stated mission, goals and objectives. It seems clear that measurement supports better management in a more constructive way and leads to the

formation of better judgments through more scientific and concrete measures, rather depending on heuristics, personal instincts or feelings.

2. ***Cause-effect linkages:*** It should be noted that the BSC promotes inter-linkages to achieve management of the whole rather than management of the parts. Leaving aside the personal political agendas of human beings, the BSC shows that the effect of a process or activity is caused through the actions of another up-stream and will, in turn, affect actions and activities down-stream. Through the strategic identification and mapping of the cause-effect linkages of the key functional perspectives of the HEI or school, based on its financial processes, customers, learning and growth actions and activities, it is proposed that the achievement of the organization's mission, goals and objectives is better managed through concerted collaboration and cooperation of the units.

Using the BSC approach, a typical strategic direction for an HEI in 2010 to 2020, for example, might be to sustain its competitive edge as the leading international learning and research university in the region. This can be broken down into key strategic areas to focus on, as shown below:

- ***Focus on Academic Excellence*** – defines the mechanisms and the constituents of academic achievement and outcomes of the HEI or school.
- ***Focus on Revenue Growth*** – defines the varieties and sources of the academic and service offerings of the HEI or school.
- ***Focus on Stakeholders' Value Creation*** – defines the education value to be created and tailored to meet the stakeholders' needs and requirements.
- ***Focus on Quality and Planning*** – defines the outcomes of performance measurement and management that is based on the strategic planning of the HEI or school; this affects its developmental and action plans.
- ***Focus on Processes*** – defines the academic and administrative processes, systems and resources needed to achieve and create education value contributing to the HEI's or school's Education Excellence and Revenue Growth.
- ***Focus on Human, Information and Organizational Capital*** – defines the human, information and organizational capital (i.e. the capabilities and capacities) needed to achieve the strategic focus points noted above.

The four main perspectives of a balanced approach regarding the key spheres of operations in a typical HEI or school, and using the four main perspectives of the Balanced Scorecard (BSC) approach of Kaplan and Norton (1996, 2001, 2004 and 2006), a typical set of directional linkages that the HEI or school needs strategically to manage is shown below:

- ***Financial Perspective:*** *To achieve academic excellence and revenue growth focus, the following are needed:*
 - High quality students and faculty;

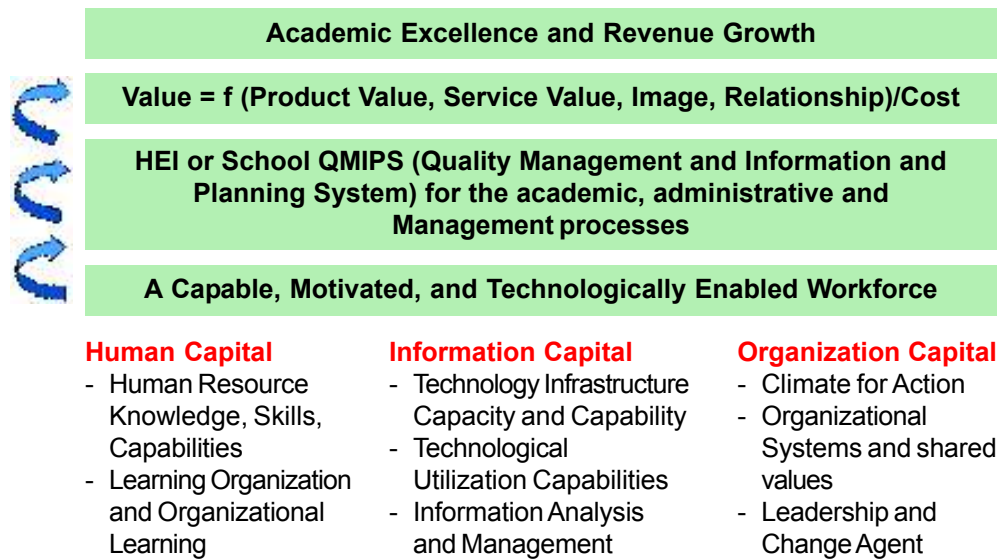
- High quality instructions in teaching, learning, research, community services and administrative accountability;
 - A high quality and innovative curriculum;
 - A high quality infrastructure, learning resources, support services and a conducive environment.
- **Customer Perspective:** *To achieve the excellence and revenue focus, stakeholder value must be created:*
Value = f [Product Value, Service Value, Image, Relationship]/Cost
- **Internal Processes Perspective:** *To create value for stakeholder, high quality processes are required:*
- QMIPS (Quality Management and Information and Planning Systems) are required to ensure quality in the academic, administrative and management processes of the HEI or school.
- **Learning and Growth Perspective:** *To achieve high quality processes, the following need to be created:*
- Human Capital
 - Information Capital
 - Organizational Capital

As shown in the four perspectives, the ultimate aim of each HEI or school is that it must be financially sustainable; this can be attained and sustained through its drive to achieve academic excellence through its high quality students, faculty, curriculum and infrastructure. This striving to achieve academic excellence will affect its short-term and long-term revenue. For a public university, this sustainability is attained through the continuing financial support of the state, and also partly through the students and through endowments. For a private university, this is achieved through the students' purchase of the educational products and services on offer and these, in turn, are denominated in the perceived value of choosing one HEI or school over the others. The bottom line is that the government budget will not be forthcoming if students do not come to the public HEI or school and the same holds true for institutions on the private sector if students as consumers do not buy the educational products and services on offer as they do not see any differential value from one offer to another. In short, financial growth and sustainability are affected by the customers' consumption of the educational products and services in terms of their perceived value.

From a customer's perspective, the purpose or mission of the HEI or school is to create and deliver educational value and the main stakeholders are the students who consume the educational and services on offer. In order to convince the stakeholders to select and buy from the proliferation of the many different sets of educational and services, the HEI or school needs to define its USP (Unique Selling Point). This USP will differentiate it from its

competitors. This means that, from the customer's perspective, the HEI or school must define its educational value in terms of the ***CV (Customer Value) = f [Product Value, Service Value, Image, Relationship]/Cost*** (Gale, 1994). The imperative is that the financial perspective of the Academic Excellence and Revenue Growth is linked to and affected by the Customer Value, as perceived by the students and stakeholders.

Figure 6.3: A balanced and linked overview of the key perspectives (1)



Translated into actionable activities (see Figure 6.3), the creation and delivery of value is designed, developed, evaluated and assessed through the internal teaching, learning and research processes, as well as the students' and stakeholders' management processes. This ensures that the value created and delivered meets the stakeholders' minimal expectations and excels in terms of adding more value when compared to competitors. There should also be continuous improvements and innovations in the educational value created and delivered, and all of these requirements must be achieved within corporate social responsibility (CSR) in terms of meeting wider and more comprehensive social and community commitments. The internal processes that create and deliver education value, as required by the stakeholders, are comprehensively managed through the HEI's or school's QMIPS (Quality Management, Information and Planning) that pervade all these internal processes. These define the key operational performance indicators that are based on the strategic goals and objectives, as defined in the strategic plan, but are acted on and measured in the action plans that will determine if achievements have been fulfilled (see Figure 6.4).

Having useful processes or resources in itself does not necessarily bring about effectiveness and efficiency, or address the competitiveness of the HEI or school. Success lies in building strong and sustainable capabilities and capacities. It should be noted that the organization, as noted earlier in the House of Learning, is basically human based. As such, the very success of the HEI or school is in the creation and development of a strong and sustainable set of strategic

capital assets. It is this very set of human, information and organizational capabilities and capacities that are utilized by the HEI's or school's internal processes to create and deliver educational value which ultimately affects its financial standing and performance. As noted in Figure 6.3, specific key performance indicators of each perspective must be defined and measured. The imperative, as shown in Figures 6.3 and 6.4, is that these KPIs for each perspective and, for that matter, the four main perspectives, have a "cause-effect" linkage.

Figure 6.4: A Balanced and Linked Overview of the Key Perspectives (2)



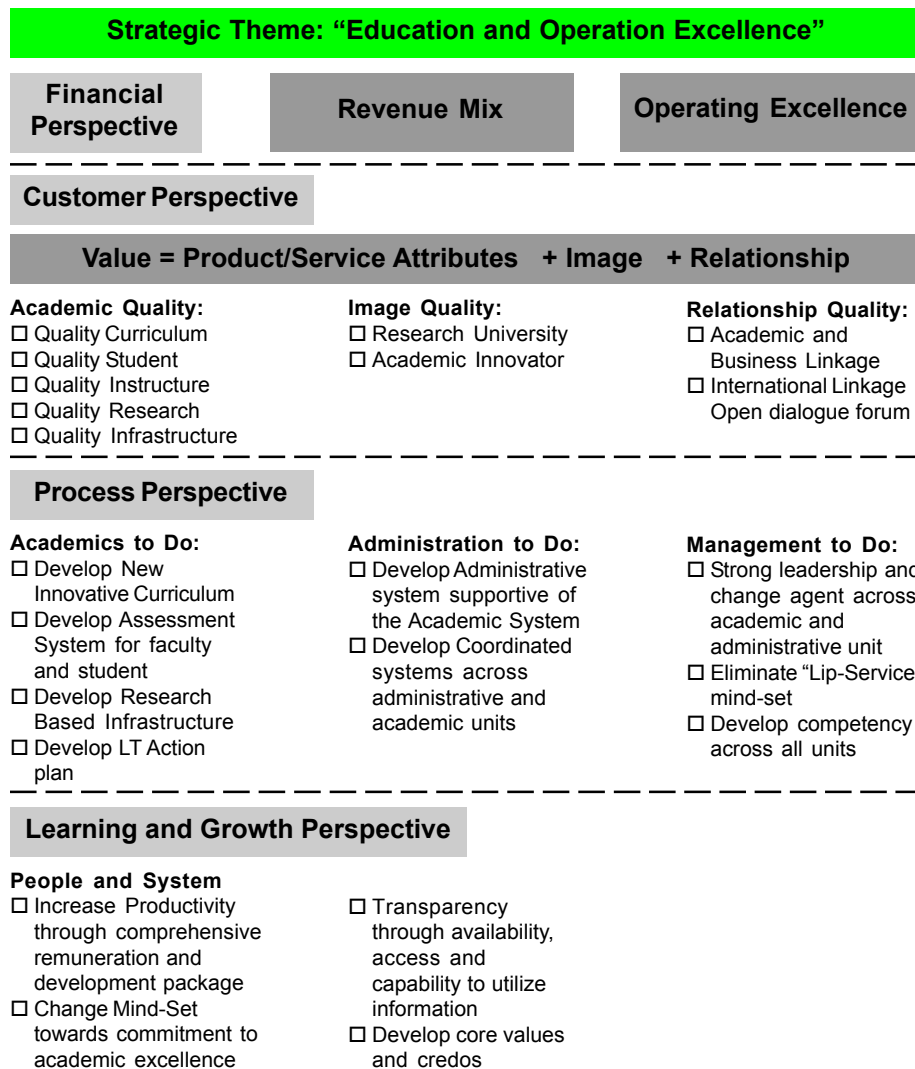
The "cause-effect" linkage, as shown above, illustrates that the HEI or school is only as strong as its weakest link; this weak spot is normally found in the foundation management of its strategic capital assets. This effectively underscores the importance of:

1. Building a strong foundation of the strategic human, information and organizational capital assets (i.e. the capabilities and capacities) of the HEI or school.
2. Building integrated inter-linkages across all the operational domains of the HEI or school.
3. Building an integrated set of sub-systems of teaching, learning and research, learning resources and support facilities and infrastructures, and other administrative support systems. These ensure the strategic management of the whole rather than the parts to ensure the whole institution is moving in the same strategic direction.
4. Building an integrated system of performance management through the measurement of the KPIs that affect the management of the HEI or school.

Ultimately, regardless of how the vision and mission of the HEI or school is stated, its primary aim is to strive for Educational and Operational Excellence. This is a common theme for all academic and administrative units which should emphasize that the mechanisms, systems, processes, procedures, policies and people are operational aspects common to all HEIs or

schools in their attempt to achieve operational quality which, in turn, affects educational quality. In other words, operational excellence should bring about education excellence. To achieve this main strategic theme, as shown in Figure 6.5, the overall aim of the financial perspective is to ensure there is an appropriate and continuous stream of revenue coming from a variety of educational products and services. At the same time, the institution must also manage its operating excellence to ensure that there is effectiveness (in “doing the right thing”) and efficiency (in “doing the thing right”). These two strategic foci underscore the financial performance and longer term sustainability of the HEI or school.

Figure 6.5: A Balanced Scorecard for a HEI or School



Source: Adapted from Kaplan and Norton (2004); *Strategy Maps: Converting intangible assets into tangible outcomes*, Harvard Business School Press, 2004, and Kaplan and Norton (2006); *Alignment: Creating corporate synergies*, Harvard Business School Press, 2006.

To achieve longer term financial sustainability, the stakeholders should perceive that the HEI or school provides better educational values or that it can excel in what it offers when compared to its peers or competitors. This entails managing the value that is proposed to the stakeholders and the public in terms of the following:

1. **Product quality** – of the educational products and services offered in terms of high quality instruction, students, curricula, infrastructures, learning resources, support services, research and community services available to society at large. Product quality hinges on the value added to the proposed value of the educational products and services.
2. **Service quality** – of the intangible service components of the education value; from the administrative units that support the creation and delivery of quality services and support, to the faculty offering the educational products. It should be noted that the traditional academic and administrative divide through non cooperation between the academia and administrative units to provide support services to the academic and stakeholders must be identified and closed. The success of the total added academic value is contingent on the value added by the support services of the administrative units. Finally, stakeholders view the proposed value of the HEI or school as a whole rather than as separate academic and administrative entities.
3. **Image** – Typically, any HEI or school prefers to project a positive image of itself to stakeholders and to the public. This normally, in business terminology, is represented by the “brand” and the meaning of the brand and its value to stakeholders. The more positive the image, the stronger the brand value, and the stronger then the standing of the HEI or school in comparison to its peers or competitors.
4. **Relationship** – Stakeholder management, achieved through setting up a proper and appropriate relationship in order to build and sustain this relationship, is important in ing a longer term win-win situation for both the education providers and education consumers. A smooth and value-added relationship that benefits both sides will bring about the development of a set of education products and services that will meet the needs and expectations of the stakeholders and the public.
5. **Cost** - The cost aspect of the education products and services should not be looked at solely from a pricing angle. The intangible costs of the whole process of consumption should also be looked at from the point of view of the opportunity cost, the time cost, the transportation cost and the psychological cost of attending a specific HEI or school. This affects the overall equation of the education value proposed to the stakeholders and the public.

Notwithstanding the need to excel in the creation and delivery of educational value to the stakeholders and the public, it must also be recognized that it is the internal processes and the systems of the HEI or school that are the source of its value creation and delivery. Basically, it

is important to define specifically what the academics, the administrative units and the management should do, how they should do it and then to excel in these actions through the performance management of its internal processes. Four main areas need to be managed:

- **operational management:** all the key teaching, learning, research, services and support, learning resources, developmental planning, quality management, fiscal and administrative management, and the infrastructure sub-systems,
- **customer management:** what and how to recruit, retain and satisfy customers,
- **innovation management:** where there are continuous improvements that lead to learning and innovations to the existing systems, processes, capabilities and capacities, education values through innovative education products and services,
- **social and regulatory management:** i.e. what and how the HEI or school contributes to social and community well-being and development, as well as operating within the regulatory compliances of its internal processes.

Last but not least, achieving success in utilizing internal processes to create and deliver the proposed educational value is contingent on the institution creating and building a strong and sustainable set of strategic human, information and organizational assets. This is the key to success for the HEI or school and the basic question is “did they learn and grow?”

6.2.3 Strategic mapping of the initiatives of the HEI or School

Because of the existing environment, the main aim of any HEI or school is to achieve a sustainable strategic direction and, in order to do this; it should encompass the following balanced rationale:

- A mix of revenues from a composite of innovative educational products and services,
- Education excellence from a composite of quality students, faculty, curriculum and infrastructure, and
- Operational excellence as a composite of administrative excellence, processes and learning and growth systems.

To achieve a five-, ten- or twenty-year strategic direction, a HEI or school should identify some basic strategic sub-themes, as exemplified below, to serve to guide the institution towards achieving its vision and mission as follows:

Theme 1: Creating and Strengthening Quality Teaching and Learning

Theme 2: Managing Quality Academic and Research Achievement

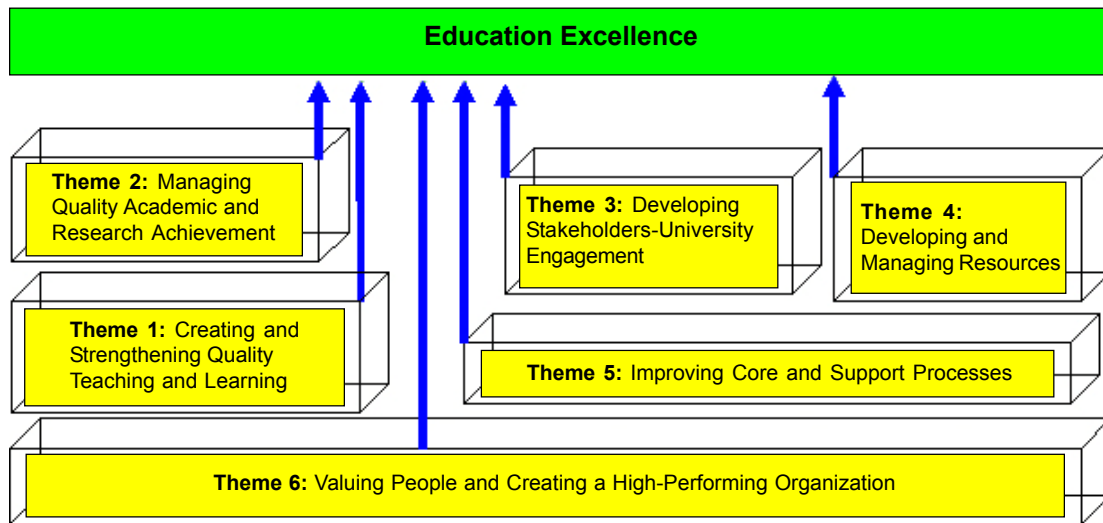
Theme 3: Developing Stakeholders-University Engagement

Theme 4: Developing and Managing Resources

Theme 5: Improving Core and Support Processes

Theme 6: Valuing People and Creating a High-Performing Organization

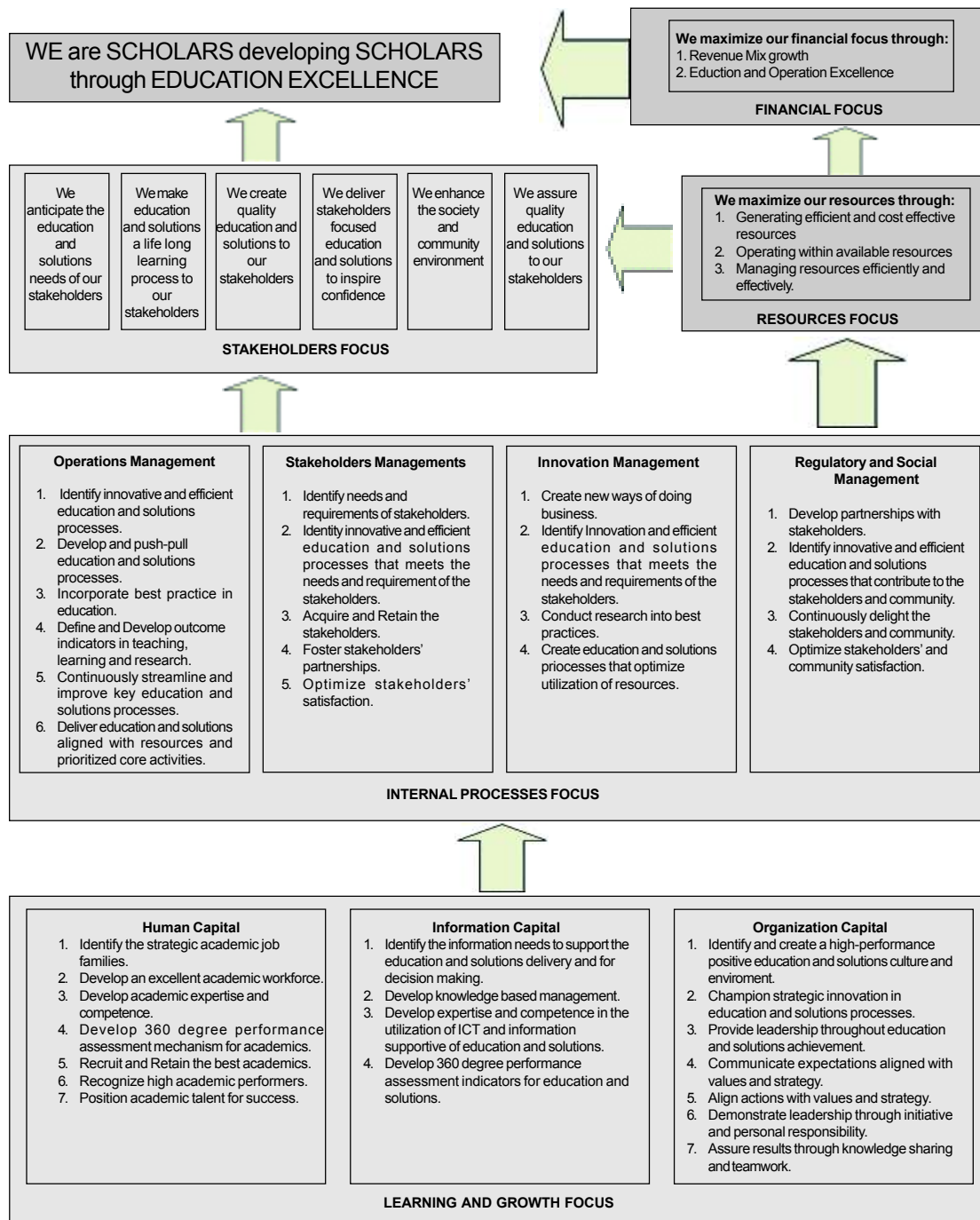
Figure 6.6: Strategic Themes Contributing to Education Excellence



6.2.4 Strategic Mapping of the Strategic Themes

The HEI or school can convert the four main perspectives discussed earlier into actionable strategic themes, as shown above. The inter-relatedness of these themes in achieving overall education excellence is shown diagrammatically in Figure 6.6 which is self explanatory and also as discussed earlier.

Figure 6.7: Strategic Mapping of the Alignment of the Strategic Focus Area of a HEI or School



Source: Adapted from Kaplan and Norton (2004); Strategy Maps: Converting Intangible Assets into Tangible Outcomes, Harvard Business School Press, 2004; and Kaplan and Norton (2006); Alignment: Creating Corporate Synergies, Harvard Business School Press, 2006.

The key theme is of ***scholars*** – who are the competent and qualified teaching faculty developing ***scholars*** – who are the students who should have the IQ, EQ, AQ and MQ. The end outputs of is the quality and competency of the students as scholars through education excellence. ***Education excellence*** is created through the key resources focus, internal processes focus and the internal learning and growth focus” which is common to most HEI or School. Identifying the focus areas and aligning them shows their inter-relatedness across the key operational areas to create education value in terms of the stakeholders’ focus, thus achieving financial sustainability. All of these have an impact on the overall education excellence.

As shown in Figure 6.7, the HEI or school should map out the alignment of the key focus areas to show their cause-effect linkages. Within each of the focus areas, the HEI or school can then determine what sub-components need to be set up in order to achieve educational excellence. This will show what needs to be done, how, when, where, and by whom it needs to be done. These sub-components identify the contribution that all units should make towards achieving a streamlined set of strategic goals and objectives that are translated into the key operational goals and objectives. This, in effect, identifies the contribution of each individual in the HEI or school regarding what and how the personal goals and objectives of each individual can contribute to the greater whole. The components of each focus area can be identified as:

- ***Learning and Growth Focus:*** This identifies the key areas of the human, information and organizational capital that form the foundation of the capabilities and capacities management of the strategic capital assets of the HEI or school. This learning and growth, the foundation of the capabilities and capacities, needs to be created or strengthened to interpret and utilize information within the organization so that the mechanisms and systems set up in the internal processes can be effectively utilized.
- ***Internal Processes’ Focus:*** This broadly classifies the HEI or school into four main areas: operational management, stakeholder management, innovation management, and regulatory and social management. These four areas represent the key internal processes that must be developed in any HEI or school as they are the key processes used to create and deliver educational value in order to meet and satisfy the needs and expectations of stakeholders.
- ***Resources’ Focus:*** This focus comprehensively covers the learning resources, facilities and equipment, together with support services and infrastructure, with the ultimate aim of creating a conducive environment where the strategic capital assets, the internal processes and the stakeholders interlink to achieve the overall aims of the HEI or school. It is imperative that support services should work alongside the academic departments in order to create an effective teaching, learning and research environment where the key players interact productively.

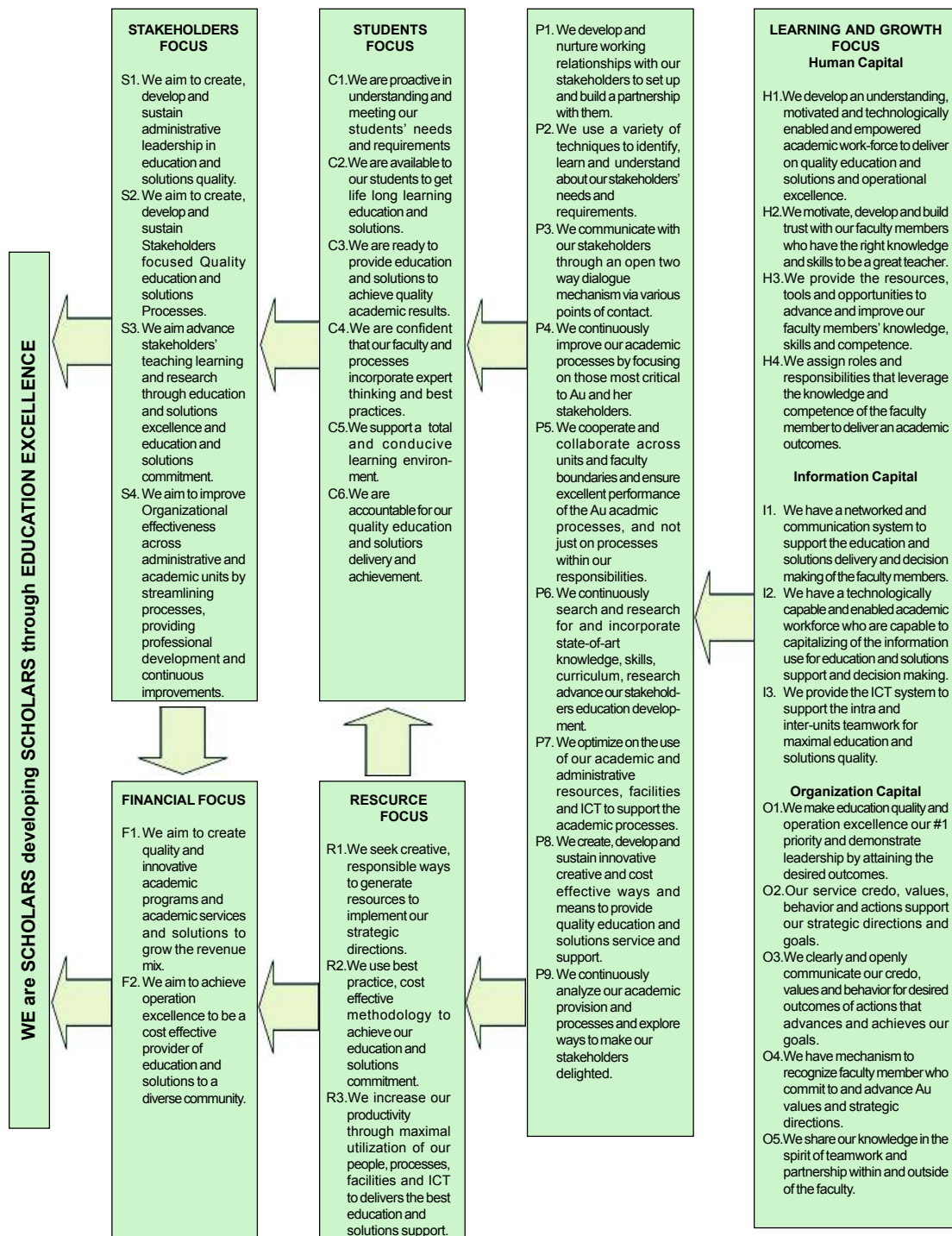
- ***Stakeholders' Focus:*** The ultimate aim of the HEI or school is to meet the needs and expectations of stakeholders by producing qualified and competent students for the employment market, thus contributing to the overall development of society and community. What the stakeholders want is educational value and the HEI or school must deliver this through its internal processes and its strategic capital assets.
- ***Financial Focus:*** The four focus areas above, once defined and developed clearly, can lead to optimal financial sustainability that will ultimately affect the basic mission of the “scholars building scholars through education excellence”.

With the above focus areas identified, the strategic goals (what the HEI or school wants to achieve) and the performance measures (which are based on the strategic objectives) can be easily identified and developed, as shown in Figures 6.8 and 6.9 respectively.

This means that, through the Strategic Mapping of the focus areas, the strategic goals and objectives will provide a platform to better manage the organizational performance and achievements of the HEI or school. This also provides a cause-effect analysis to determine the key causes of any areas requiring improvement or of any deficiencies.

The same methodology can also be used create a strategic map of the administrative side of the HEI or school, together with its corresponding strategic goals, strategic objectives and performance measures, as shown in Figures 6.10, 6.11 and 6.12. This mapping out of the administrative side of the HEI or school is beneficial as the same focus areas are followed in terms of learning and growth, indicating administrative learning and growth should be supportive of the academic side. The aim here is to close the academic and administrative divide through the singular theme of “scholars building scholars” but, in this case, the administrative units constitute service catalysts that must create and build operational excellence in their service and support infrastructure.

Figure 6.8: Mapping of the Strategic Goals of a HEI or School



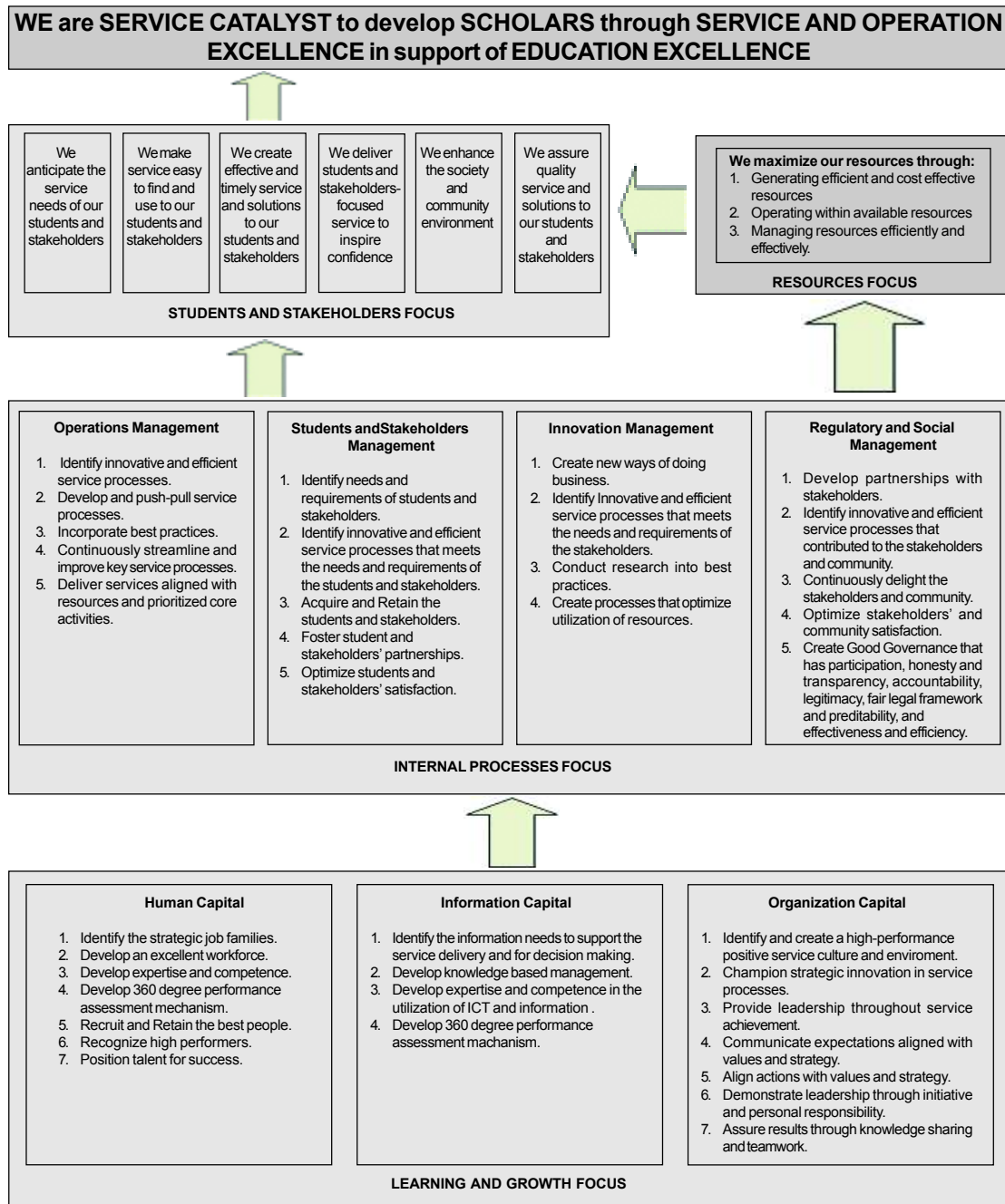
Source: Adapted from Kaplan and Norton (2004); Strategy maps: Converting intangible assets into tangible outcomes, Harvard Business School Press, 2004; and Kaplan and Norton (2006); Alignment: Creating corporate synergies, Harvard Business School Press, 2006.

Figure 6.9: Mapping of Strategic Objectives and Key Performance Measures of a HEI or School

WE are SCHOLARS developing SCHOLARS through EDUCATION EXCELLENCE	
STRATEGIC OBJECTIVES	PERFORMANCE MEASURES
FINANCIAL FOCUS PERSPECTIVE	
1. Revenue Mix Growth 2. Education and Operation Excellence	1. Revenue Mix Growth Index 2. Efficient and Effectiveness Operation Index
STUDENT FOCUS PERSPECTIVE	
1. Quality Education 2. Value for Money	1. Students Service Index (CSI) – Rating on academic and student outcomes 2. Students Service Survey – Quality/Value for money and Fair pricing
STAKEHOLDER FOCUS PERSPECTIVE	
1. Quality Education and Solutions 2. Meeting Needs and Requirements	1. Stakeholders Service Index (SSI) – Rating on academic student and solutions outcomes 2. Stakeholders Service Survey – Performance Outcomes meeting accepted benchmark
RESOURCE FOCUS PERSPECTIVE	
1. Cost Effectiveness 2. Improve Resource and Asset for Service Utilization and Management 3. Develop Effective Resource Management Report System	1. Operation Cost as % of Investment or Budget for activities adjusted for time anomalies 2. Invested Cost as % Budgeted activities for service performance affecting CSI 3. Operational Information System for Resource performance monitoring and utilization
INTERNAL PROCESS FOCUS PERSPECTIVE	
OM1. Increase Value Perceptions of Education and Solutions Delivery OM2. Promote quality Teaching, Learning and Research OM3. Promote quality Service and Support to Student Activities and Student Development OM4. Develop and Improve Internal Controls and Outcome Indicators CM1. Understand Customer and Stakeholders Needs and Requirements CM2. Increase Customer Retention and Acquisition IM1. Streamline Existing Core Academic Activities and Processes IM2. Increase Innovative Academic Activities and Processes RSM1. Increase Academic Services to Society and Community	OM1. Value Perceptions of Education and Solutions Delivery as % of Service Failures OM2. Achievement of outcome indicators of Teaching, Learning and Research OM3. Number of Service Contribution and Failures as a % of Service Failures OM4. % of incremental improvement in outcome indicators achieved over the last cycle audit and assessment C1. Customer and Stakeholders Survey of Needs perceptions and expectations C2. Number of Customer Retained and Acquired as % of FTES IM1. Academic Activities and Process Re-engineered milestones IM2. Number of Innovative and New Academic Activities and Processes as % of Activities and Processes RSM1. Value and Number of Academic Services to Society and Community as % Total Academic Services
LEARNING AND GROWTH FOCUS PERSPECTIVE	
HUMAN CAPITAL HC1. Improving faculty members' motivation by developing a more supportive work environment HC2. Improve faculty members Academic Knowledge and Skills Competencies HC3. Drive Individual and Teamwork responsibility and accountability	HUMAN CAPITAL HC1. Selected Organization Culture Index and Rating HC2. Selected Academic Knowledge and Skills Competencies Index and Rating HC3. Selected Individual and Teamwork responsibility and accountability Index and Rating
INFORMATION CAPITAL IC1. Improve and Strengthen ICT system IC2. Improve faculty members' ICT Knowledge, Skills and Competencies in ICT and information Utilization	INFORMATION CAPITAL IC1. ICT system project milestones IC2. Faculty members' ICT Knowledge, Skills and Competencies and information Utilization Index and Rating
ORANIZATION CAPITAL OC1. Create and develop a more conducive and supportive work environment OC2. Create a Quality-driven Culture and Mind-set OC3. Create and Develop a 360 degree performance based assessment and and reward system	ORGANIZATION CAPITAL OC1. Selected conducive and supportive work environment Index and Rating OC2. Quality-driven Culture and Mind-set Index and Rating OC3. 360 degree performance based assessment and reward system Index and Rating

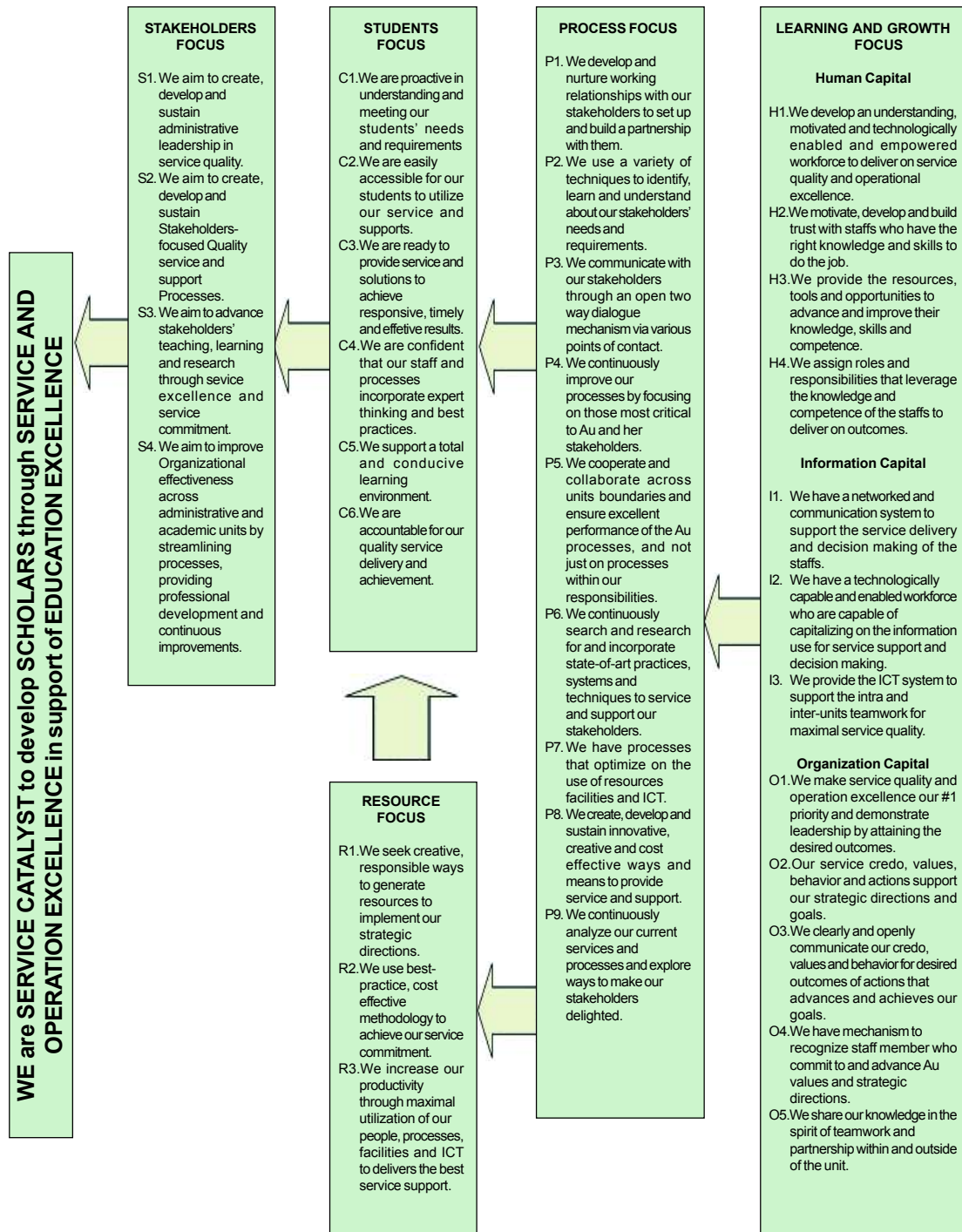
Source: Adapted from Kaplan and Norton (2004); Strategy maps: Converting intangible assets into tangible outcomes, Harvard Business School Press, 2004; and Kaplan and Norton (2006); Alignment: Creating corporate synergies, Harvard Business School Press, 2006.

Figure 6.10: Strategic Map of the Administrative Units of a HEI or School



Source: Adapted from Kaplan and Norton (2004); Strategy Maps: Converting intangible assets into tangible outcomes, Harvard Business School Press, 2004; and Kaplan and Norton (2006); Alignment: Creating corporate synergies, Harvard Business School Press, 2006.

Figure 6.11: Mapping the Strategic Goals of the Administrative Units of a HEI or School



Source: Adapted from Kaplan and Norton (2004); Strategy Maps: Converting intangible assets into tangible outcomes, Harvard Business School Press, 2004; and Kaplan and Norton (2006); Alignment: Creating corporate synergies, Harvard Business School Press, 2006.

Figure 6.12: Mapping the Strategic Objectives and Performance Measures of the Administrative Units of a HEI or School

WE are SERVICE CATALYST to develop SCHOLARS through SERVICE AND OPERATION EXCELLENCE in support of EDUCATION EXCELLENCE	
STRATEGIC OBJECTIVES	PERFORMANCE MEASURES
STUDENT FOCUS PERSPECTIVE	
1. Quality Service	1. Students Service Index (CSI) – Rating on SERVQUAL dimensions and student Satisfaction Rating
2. Value for Money	2. Students Service Survey – Quality/Value for money/and Fair pricing
STAKEHOLDER FOCUS PERSPECTIVE	
1. Quality Service	1. Stakeholders Service Index – Rating on SERVQUAL dimensions and Stakeholder Satisfaction Rating
2. Meeting Needs and Requirements	2. Stakeholders Service Survey – Performance Outcomes meeting accepted benchmark
RESOURCE FOCUS PERSPECTIVE	
1. Cost Effectiveness	1. Operation Cost as % of Investment or Budget for activities adjusted for time anomalies
2. Improve Resource and Asset for Service Utilization and Management	2. Invested Cost as % Budgeted activities for service performance affecting CSI
3. Develop Effective Resource Management Report System	3. Operational Information System for Resource performance monitoring and utilization
INTERNAL PROCESS FOCUS PERSPECTIVE	
OM1. Increase Value Perceptions of Service Delivery	OM1. Value Perceptions of Service Delivery as % of Service Failures
OM2. Promote Service and Contributions to Teaching, Learning and Research	OM2. Number of Service Failures as a % of CSI
OM3. Promote Service and Support to Student Activities and Student Development	OM3. Numbers of Service Contribution and Failures as a % of Service Failures
OM4. Develop and Improve Internal Controls and Outcome Indicators	OM4. % of incremental improvement in outcome indicators achieved over the last cycle audit and assessment
CM1. Understand Customer and Stakeholders Needs and Requirements	C1. Customer and Stakeholders Survey of Needs perceptions and expectations
CM2. Increase Customer Retention and Acquisition	C2. Number of Customer Retained and Acquired as % of FTES
IM1. Streamline Existing Core Activities and Processes	IM1. Activities and Process Re-engineered milestones
IM2. Increase Innovative Activities and Processes	IM2. Number of Innovative and New Activities and Processes as % of Activities and Processes
RSM1. Increase Services to Society and Community	RSM1. Value and Number of Services to Society and Community as % Total Services to Stakeholders
LEARNING AND GROWTH FOCUS PERSPECTIVE	
HUMAN CAPITAL	HUMAN CAPITAL
HC1. Improving staff's motivation by developing a more supportive work environment	HC1. Selected Organization Culture Index and Rating
HC2. Improve staff and Leadership Knowledge and Skills Competencies	HC2. Selected Staff and Leadership Knowledge and Skills Competencies Index and Rating
HC3. Drive Individual and Teamwork responsibility and accountability	HC3. Selected Individual and Teamwork responsibility and accountability Index and Rating
INFORMATION CAPITAL	INFORMATION CAPITAL
IC1. Improve and Strengthen ICT system	IC1. ICT system project milestones
IC2. Improve staff ICT Knowledge, Skills and Competencies in ICT and information Utilization	IC2. Staff ICT Knowledge, Skills and Competencies and information Utilization Index and Rating
ORANIZATION CAPITAL	ORGANIZATION CAPITAL
OC1. Create and develop a more conducive and supportive work environment	OC1. Selected conducive and supportive work environment Index and Rating
OC2. Create a quality Service-driven Culture and Mind-set	OC2. Quality Service-driven Culture and Mind-set Index ana Rating
OC3. Create and Develop a 360 degree performance based assessment and reward system	OC3. 360 degree performance based assessment and reward system Index and Rating

Source: Adapted from Kaplan and Norton (2004); Strategy Maps: Converting intangible assets into tangible outcomes, Harvard Business School Press, 2004; and Kaplan and Norton (2006); Alignment: Creating corporate synergies, Harvard Business School Press, 2006.

Summary

Of the three main phases of Strategic Management (Strategic Analysis, Strategic Formulation and Strategic Implementation), the last phase of Strategic Implementation is the most difficult. This is because there is a lack of research into strategic implementation, and also because this stage moves from planning to actual implementation, and from the drawing board to implementation by people. As noted earlier, there are 3 main domains of human, information and organization. The key issue lies in the human domain in the interpretation and utilization of information within the organization. These three strategic capital assets are human based and this is where problems arise in the implementation of strategies.

This chapter briefly highlights the issue of using the conventional approach in implementing strategies within the organization. As an alternative, this book introduces Kaplan and Norton's Balanced Scorecard approach which uses a strategic map to align the strategies of an HEI or school based on the four focus areas: the financial, customer, internal processes, and learning and growth perspectives.

It is contended here that strategically mapping out the key focus areas in the creation and delivery of educational values will bring about a more aligned and measurable approach in implementing the HEI's or school's strategies more effectively. It is also argued that, by identifying the key focus areas, the HEI or school can better manage the creation of the necessary capacities and capabilities as needed to deliver the education value it proposes to stakeholders.

As such, this chapter outlines the strategic implementation process by using a Strategic Map of the academic and administrative units, the strategic initiatives, strategic goals and objectives, and their corresponding performance metrics or measures.

Reference

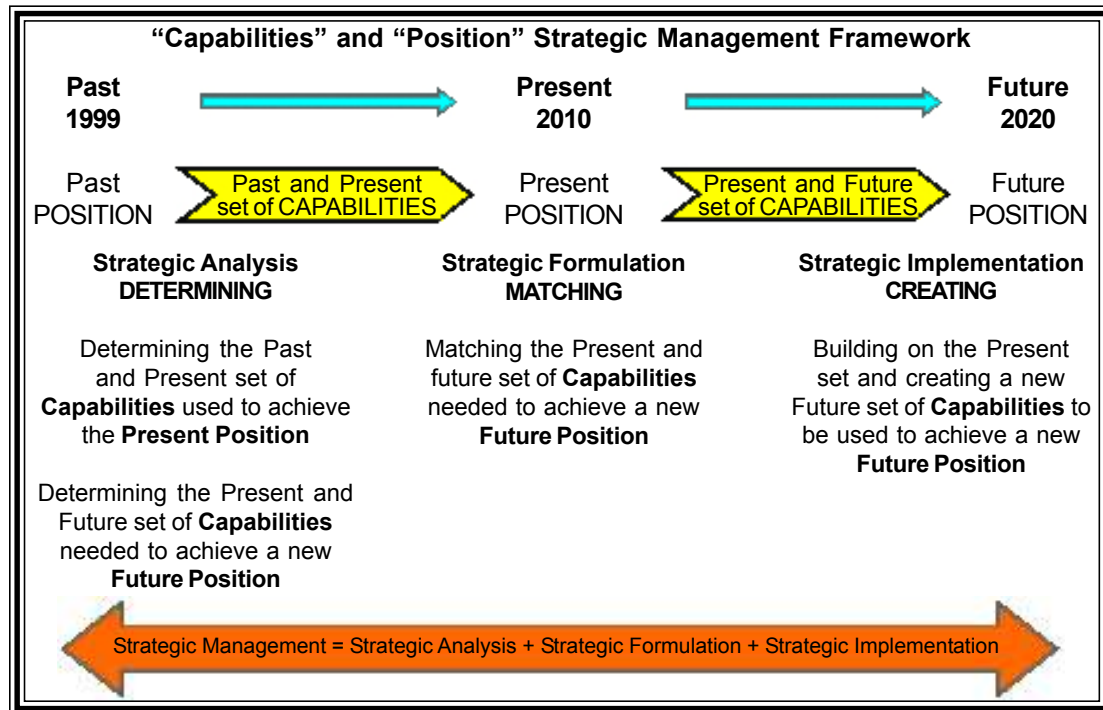
1. Fogg, C.D., (1999), *Implementing your Strategic Plan: How to turn "intent" into Effective Action for Sustainable Change*, AMA Publications, American Management Association, NY.
2. Kaplan, Robert S. and Norton, David P. (1996); *Translating Strategy into Action: The Balanced Scorecard*, HBS Press 1996.
3. Kaplan, Robert S. and Norton, David P. (2001); *The Strategy Focused Organization*, HBS Press 2001.
4. Kaplan, Robert S. and Norton, David P. (2004); *Strategy Maps: Converting Intangible Assets into Tangible Outcomes*, Harvard Business School Press, 2004.
5. Kaplan, Robert S. and Norton, David P. (2006); *Alignment: Creating corporate Synergies*, Harvard Business School Press, 2006.
6. Neely, A. (1999); *Measuring Business Performance*, The Economist in association with Profile Books, UK 1999.
7. Niven, P. R. (2002); *Balanced Scorecard Step by Step: Maximizing Performance and Maintaining Results*, John Wiley & Sons, 2002.

Chapter 7

From Strategic Mapping to Developing Operational Action Plans

Objectives of the Chapter

- To understand Strategic Implementation and what needs to be done.
- To understand how the Strategic Map can be used to align the Strategic Plan of the HEI, school, departments and/or programs.
- To illustrate the development of the mission, strategic goals, initiatives and performance measures and their operationalization.
- To understand the above alignment through the use of the HEI and the HEI - SOA as an illustration of the alignment and development of the action plans.



7.1 Strategic Implementation

The strategic implementation goes into the domain of the actual implementation of the strategic plan. This is the most difficult part as it calls for:

- A change in the mindset and culture of the value system, tying together the success of all the programs in the departments, all the departments in the school, and of all the schools in the HEI.
- A change in the paradigm of managing since all the programs in the department must align their strategic plans with that of the department, the departments with that of the school,

and the schools with that of the HEI; however, this will more simplified and more action-oriented.

- A change in the action-oriented set of action plans for each of the strategic goals and strategic objectives to be achieved at all levels.
- A change in the capabilities and capacities needed to achieve a future position as depicted in the “capabilities and position” perspectives in this book.
- A change in the leadership at all levels to bring about these changes; this will be achieved through establishing communication, understanding and commitment by means of the change agents or change catalysts.

To this end, in order to implement the strategic plan of the HEI successfully, it must identify:

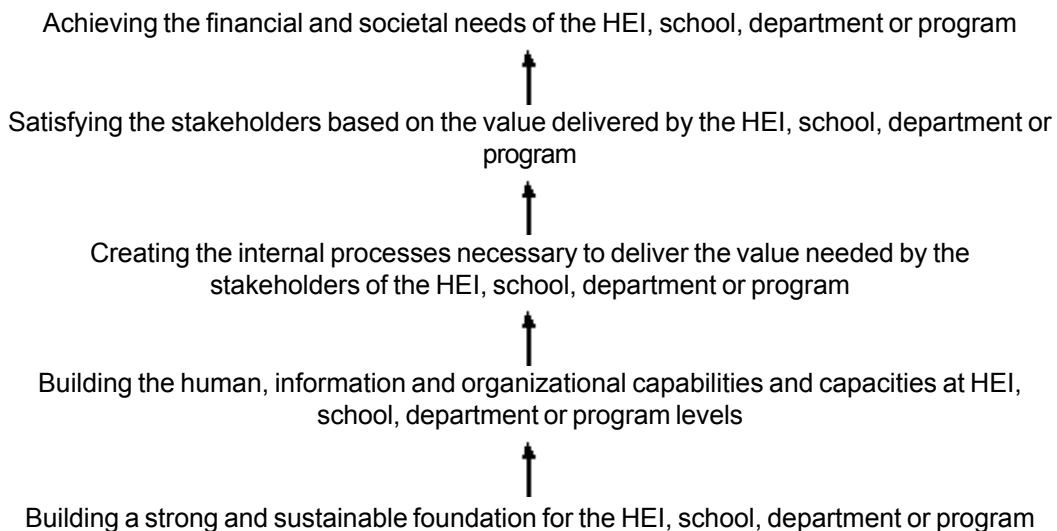
- The key human, information and organizational capabilities and capacities that form the foundation of success of the programs, departments, schools and the HEI. These are cascaded down from the strategic level of the HEI to the operational level of the schools, departments and programs which means that the vision, mission, strategic goals and objectives of the programs and the colleges will be aligned with those of the institution.
- The internal processes required by the human capital to interpret and utilize the information within the organizational domains in order to deliver the value expected by the stakeholders.
- The satisfaction of the stakeholders based on the value delivered by the school thus fulfilling the school’s financial and social needs.

7.2 What needs to be done by the Schools, Departments and Programs?

- i. To simplify the process of the strategic implementation of the HEI’s Strategic Plan, or in order to cascade it effectively from the HEI to the school, to the department, and to the program, the HEI can use the “Balanced Scorecard” approach to formulate the overall strategic map of the HEI or school, as discussed in Chapter 6. The key performance indicators will also need to be identified in all four key perspectives noted above, and in the seven “S” areas below, as also discussed in the mapping of the strategic goals as objectives which are based on its initiatives or actions (as discussed in Chapter 6). This is a principle of “management through measurement”.
- ii. The task force might need to be broken down into smaller groups of two – three per group to identify and address the “what to do and how to do it” or key actions, systems, processes and mechanisms in the key areas. The key areas that need to be addressed are:
 - a. **Strategy** – Identify the detailed action plans to BUILD the needed capabilities and capacities at all levels of the HEI, school, department or program. This goes into the realm of “how to do” and carry out the real action plans based on the strategic goals and objectives.

- b. **Structure** – Identify any changes needed in the governance or administrative structure of the HEI, school, department or program levels in order to streamline channels of command and lines of authority; this enables everyone to carry out their roles, responsibilities and accountabilities.
- c. **Systems** – The internal systems directly achieve the teaching/learning/research of the HEI, school, department or program and the external support systems, delivered by the administrative service and supporting units, detail what information and service supports are needed and how these are to be created and delivered to support the achievement of the school’s mission and goals.
- d. **Staff and Skills** – The type of staff and the competencies (i.e. the capabilities and capacities) they need, together with a new set that must be developed on a continuous and long-term basis, in order to achieve the success of the HEI, school, department or program.
- e. **Style of management** – The type of management and leadership at HEI, school, department or program levels that can bring everyone on board the long but never-ending journey of quality and continuous improvement; this leads to operational excellence that, in turn, will pave the way to educational excellence.
- f. **Shared Value** – This is main “glue” that makes the fluid components of the organization and its human assets stick together. It is based on a set of common beliefs, culture, values and tradition that defines “the way we do things here”. It is a common unifying bond that links the softer strategic capital assets within the harder organizational infrastructure and systems.

When identifying the above, the following BSC approach should be kept in mind:



The key expected outcomes are:

- a. A set of action plans for the HEI, school, department or program.
- b. A set of strategic and action plans of the HEI, school, department or program with clear KPIs delineating responsibility and accountability.

7.3 From Strategic Mapping to Developing Operational Action Plans

Actions plans or the OYPB at the HEI, school, department or program levels must specify the actions needed to address each of the issues in the top academic or administrative units and to reach each of the associated goals, as identified in the strategic maps above. Who will complete each action and according to what timeline must also be outlined, as specified in the strategic goals, objectives and performance measures.

7.3.1 Guidelines in Developing the OYPB (One-Year-Plan and Budget)

7.3.1.1 Conduct Action Planning (project objectives, responsibilities and timelines):

For each strategy identified in the five-year or ten-year strategic plan, SMARTER (Specific, Measurable, Acceptable, Realistic, Time frame, Extending, Rewarding) project objectives should be written down. These must be achieved while implementing the strategy and should also indicate by when the project objectives should be completed, by whom, and how are they to be measured and assessed, especially over the next academic year.

7.3.1.2 Develop an Operating Budget in the OYPB (One-Year-Plan and Budget):

The resources the HEI, school, department or program need to be mapped out in order achieve the goals in the strategic plan and the projects identified in the OYPB (One-Year-Plan and Budget); what this will cost and the resources required for each project must also be identified. This does not have to be exactly accurate (as it is a close approximation of the utilization of resources) and, in any case, it may be that the final project budget will be changed as more attention may be paid to the design and planning of the educational product in the actual project proposal as compared to when formulating it actually starts. A budget should be created for each project for each of the years included in the strategic plan but particular attention must be paid to the first year (i.e. the OYPB that defines the projects that need to be developed and implemented, and the budget that is required to achieve the goals and mission of the academic or administrative units).

Each of the educational products, processes or work goals should be considered and thought should be given to how much revenue each might generate. Next, the expenses to produce, sell and support the educational product, process or work should be thought out to include areas such as human resources, facilities, equipment, special materials, marketing and

promotions, etc. (Note that this action planning or the OYPB often provides strong input to the overall budget and is likely to convert the operating budget of the HEI, school, department or program into a set of project budgets.)

In the OYPB there are many different kinds of effect the HEI, school, department or program might seek to create. These are as follows:

- i. What are you trying to achieve?
- ii. What are you trying to preserve?
- iii. What are you trying to avoid?
- iv. What are you trying to eliminate?

These can be recast into the four questions as follows:

- i. What does the HEI, school, department or program want that it does not have? (*Achieve*)
- ii. What does the HEI, school, department or program want that it already has? (*Preserve*)
- iii. What does the HEI, school, department or program NOT have that it does not want? (*Avoid*)
- iv. What does the HEI, school, department or program have now that it does not want? (*Eliminate*)

7.3.1.3 Specifications of the OYPB at each level of the HEI, School, Department

or Program: The action plan for academic and administrative units in the HEI, school, department or program identifies what needs to be done and how it is to be done; this is normally defined or created as the projects that are to be implemented. A project should identify each major function, each administrator and each faculty or staff, based on the following key common education areas for any HEI, school, department or program:

- i. Mission and Goal of the University, School or Program
- ii. Teaching and Learning
- iii. Student Services and Development
- iv. Research
- v. Faculty and Staff Development
- vi. Academic Services
- vii. Preservation of Art and Culture
- viii. Administration and Management covering Governance and Learning Resources and Facilities
- ix. Finance and Budget
- x. Quality Assurance System.

Each of the projects needs to specify:

- i. The goal(s) that are to be accomplished.
- ii. How each goal contributes to the overall strategic goals of the academic and administrative units of the HEI, school, department or program.
- iii. What specific results (or objectives) must be accomplished that, in total, reach the goal of the academic and administrative units of the HEI, school, department or program?
- iv. How will those results be achieved?
- v. When will the results be achieved? (i.e. produce timelines for each objective).

7.4 Alignment of the Strategic HEI Plan in Schools and Action Planning

It is important that the VMGO (Vision, Mission, Goals and Objectives) of the academic or administrative units of the schools, departments or programs are aligned with that of the university or HEI. This alignment is imperative as whatever the academic or administrative units of the HEI, school, department or program levels do in terms of the mission, the goals, SMARTER objectives, and strategies, projects and budget, they should be aligned to support and achieve the basic mission and philosophy of the university. A worked-out example is offered below to show the alignment between the HEI and school levels.

7.4.1 Worked out Example of the Mission of a HEI

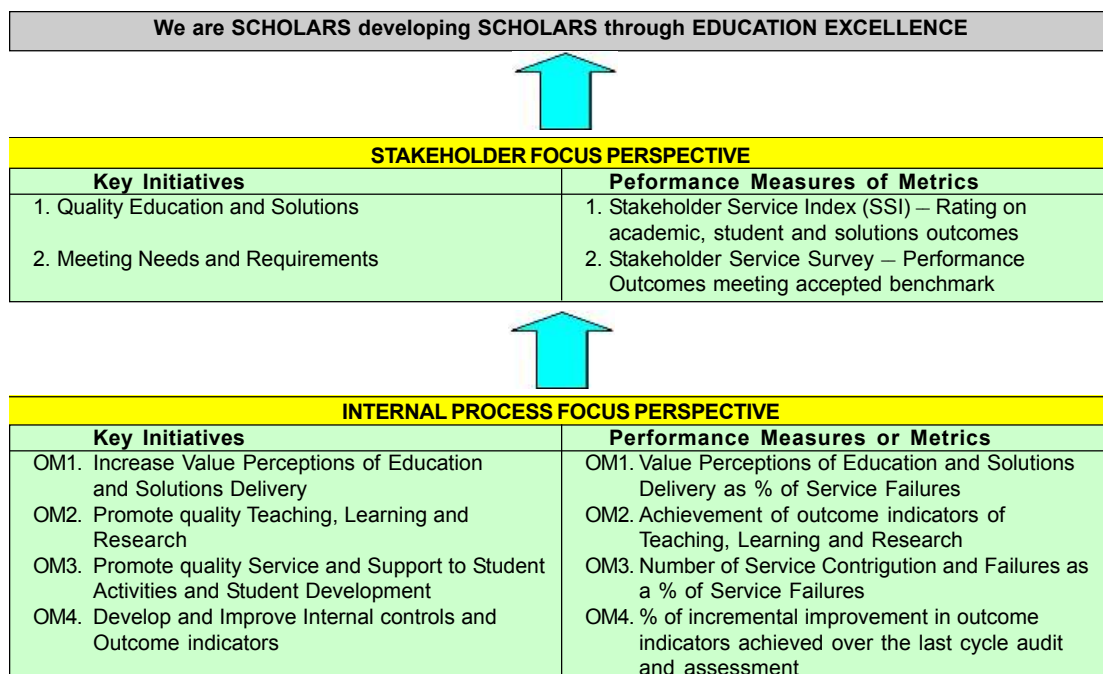
In Chapter 5, based on the Strategic SWOT, the mission statement of the HEI was defined as:

“The HEI exists for the main purpose of serving the nation by providing scientific and humanistic knowledge, particularly in business education and management science, through research and interdisciplinary approaches for the social advancement of the region”.

To this end, it aims to produce intellectually competent graduates who:

- *are morally sound, committed to just action, and open to further growth;*
- *appreciate freedom of expression, are imbued with ethical attitudes and ideologies through a carefully integrated curriculum of Ethics, Science, Languages and Business Management;*
- *achieve academic excellence through hard work, critical and positive thinking, and effective decision-making.*

Figure 7.1: Linkages of the Process and Stakeholder Perspectives in the HEI Strategic Map



Based on its mission statement, the HEI or school will develop a Strategic Map for its academic and administrative units, as discussed in depth in Chapter 6. The condensed version of Figure 7.1 is used as an illustration of:

- The use of the Strategic Map to set out the cause-effect linkage across the main perspectives or, in this case, the focus areas that need to be addressed by the HEI or school by mapping the linkages, all of which leads to the achievement of “scholars developing scholars through education excellence”.
- The use of the Strategic Map to identify the strategic goals, initiatives and objectives, together with their corresponding performance measures.
- The Strategic Map identifies both the academic (OM1 and OM2) and administrative (OM 3 and OM 4) actions with their respective performance measures of their internal processes, as well as the initiatives and performance metrics for the stakeholder perspectives.

As its name implies, the Strategic Map is a critical setting out of the key focus areas or strategic goals, the initiatives and the performance metrics. It is important that the Strategic Map shows these as they represent the blueprints of “what to do” that comprehensively show the ‘big picture’ of key actions that must be taken.

These key actions are then used as the blueprint for the lower levels to develop detailed action plans for their schools, departments or programs. This shows that the operation of the lower level departments and programs should be aligned with those of the school or HEI to ensure that the whole institution achieves what it set out to do, as stated earlier. The use of the Strategic Map, which is operationalized through the Strategic Plans of the school, departments or programs, are actioned in the future through the development of the action plans, collectively called the OYPB (One-Year-Plan and Budget). The OYPB is made up of detailed project action plans for each of the smaller initiatives, actions or activities.

Details regarding how to carry out the strategic plan and the action plan are illustrated in the following sections.

7.4.2 Worked out Example of Strategic Goals for Theme 2 on Creating and Strengthening Quality Teaching and Learning for HEI (P1 - Phase 1 and P2 - Phase 2)

It should be noted that, in order to fulfill the HEI's mission to form intellectually competent graduates, the teaching/learning processes are key and so, the strategic goals for this thematic strand of creating and strengthening quality teaching and learning, must be identified. These are the overarching strategic goals for the HEI and must therefore be translated into the school's mission and strategic goals. Thus, considering strategic theme 2 (as identified in Chapter 5), its corresponding strategic goal can be defined as follows:

Table 7.1: Strategic Goals for Creating and Strengthening Quality Teaching and Learning in the HEI

P1 2.1 HEI will create a positive learning environment that will enable students to achieve their full academic potential and to cultivate their personal development.
P1 2.2 HEI will create a curriculum to meet the highest standards of excellence across the university.
P1 2.3 HEI will develop a system for offering academic advice that will meet the needs of students and that will lead to academic success.
P2 2.4 The programs of the HEI will develop students' competencies, knowledge and skills, and will effectively prepare students to become competent and ethical citizens.
P2 2.5 HEI will continually improve and innovate the quality and delivery of the programs on offer and will link these to the National Qualification Framework at all levels.
P2 2.6 HEI will include more international aspects in the context and content of its curriculum.

7.4.3 Worked out Example of the Mission of a School of the HEI – School of Art (SOA)

Using a typical School of Art in any HEI as an illustration, based on the mission statement of the HEI, the HEI or school would need to define a set of mission and strategic goals aligned to the paramount mission of the HEI itself, and not just to the strategic direction of the HEI – SOA. As such, the HEI – SOA could define its mission as: follows:

*“The School of HEI - SOA exists for the main purpose of serving society with the highest commitment through providing **high quality educational processes** with the **best academic resources**, using a student-centered approach, advanced information technology and innovations, to **educate qualified graduates, create a body of knowledge through research**, and provide academic services in the liberal arts’ disciplines to the advancement of society in the region”.*

It should be noted here that the HEI-SOA has defined its mission using the HEI mission as the overall guiding strategic direction. This defines the existence of the HEI-SOA within the context of the HEI and demonstrates that it is supported by and aligned to the HEI.

7.4.4 Worked out Example of Strategic Thematic Strand 1 for the HEI - SOA

Once the HEI - SOA has defined its mission, as illustrated in Chapter 5, the HEI - SOA can also use a similar approach to map out its strategic plan by identifying its strategic theme, identify its focus area through strategic mapping, and set out its strategic goals, strategic objectives and performance measures. As shown below, the strategic themes selected by the HEI-SOA reflect the overall position of the HEI and the strategic goals are based on the HEI’s overarching strategic goals.

As an illustration, the strategic themes of the HEI - SOA are identified with its corresponding strategic goals as follows:

Theme 1: Enhancing the Strategic Directions of the HEI - SOA and its departments

Goal 1.1 HEI - SOA will distinguish itself for Academic Excellence and raise its profile in the region.

Goal 1.2 HEI - SOA will distinguish itself by recruiting, retaining and graduating a larger, more academically prepared, of higher quality and more capable student body who are motivated in seeking higher education.

Goal 1.3 HEI - SOA departments will develop and implement a plan to increase enrollment growth that is tied to the institutional strategic plan.

Goal 1.4 HEI - SOA will achieve a strong and sustainable college through financial management.

Goal 1.5 HEI - SOA will be a critically innovative, change-responsive and dynamic learning organization.

Goal 1.6 HEI - SOA will provide its students with a student-centered education that will prepare them academically as professionals in their chosen academic fields and as active moral citizens in the global community.

7.4.5 Worked out Example of Goals and Objectives of the HEI for Teaching and Learning

As noted earlier, an example of the HEI's strategic goals for teaching and learning is:

P1 2.2 HEI will create a curriculum meeting the highest standards of excellence across the university; (this represents the envisioned position of the HEI).

P2 2.4 The programs of the HEI will develop students' competencies, knowledge and skills, and will effectively prepare students to become competent and ethical citizens.

Using the HEI's overarching organization goals, the HEI - SOA will need then to identify its own strategic goals and align them with those of the HEI. The development of the strategic goals of the HEI - SOA is based on its mission as the strategic goals are meant to be a subset of areas of focus and achievements for the HEI - SOA. The HEI - SOA cannot set the strategic goals without fully establishing and understanding its mission as the goals are the operational part of the achievements of the overall mission.

The mission of the HEI - SOA, as a ***high-quality educational process***, calls for the HEI - SOA to identify its goals, objectives, strategies and action plan to support a high quality curriculum that will lead to the highest standards of excellence. The strategic goals, its sub-goals, SMARTER objectives, strategies and action plans for the HEI - SOA, which represent the capabilities and capacities to be created, are illustrated in the examples below.

7.4.6 Development of Action Plans for Strategic Thematic Strand 1 of HEI - SOA based on the Key Strategic Goals of the HEI

Strategic thematic strand 1 is 'Enhancing the Strategic Directions of HEI - SOA and its departments'. One of the strategic goals in the key theme in this strand is:

Goal 1.6 HEI - SOA will provide its students with a student-centered education that will prepare them academically as professionals in their chosen academic fields and as active moral citizens in the global community.

Strategic goal 1.6 means “Providing high quality educational processes”, as reflected in the mission and then operationalized as Goal 1.6. The main strategic goal of 1.6 is then divided into actions areas, as shown in strategic goals 1.6.1 and 1.6.2, with their corresponding strategic objectives, (which in effect are the key performance indicators or performance measures), and the strategy at a program level. Each one of the goals and objectives are translated into smaller, detailed action plans. These are shown in Tables 7.3 and 7.4 for the main Strategic Goal 1.6.

Goal 1.6.1: Set up task forces at a school and department level and specify the roles and responsibilities within these task forces, including who is accountable for identifying and developing a teaching and learning plan.

SMARTER Objectives:

Objective 1.6.1.1 100% of task forces at a school level and departments level must be established by 2010.

Goal 1.6.2: The teaching-learning processes must be student-centered

SMARTER Objectives:

Objective 1.6.2.1 40% of the content of the school’s curriculum and delivery processes must be student-centered by 2010 with a completion rate of 100% by 2012.

Objective 1.6.2.2 30% of the school’s faculty must be trained in student-centered pedagogy by 2010, with a 100% rate being achieved by 2015.

Strategy:

Strategy 1.6.1.1 To set up an academic task force to lay down the criteria and standards for a student-centered curriculum and delivery processes; to review and ensure that the curriculum and the delivery conforms to the criteria and standards.

Strategy 1.6.2.2 To identify faculty members who need training in student-centered approaches and to develop workshops to train the faculty.

7.4.7 Projects for “The teaching-learning processes must be student-centered”

Project 1.6.1.1 Details of the project and budget to be used to set up the academic task force in order to develop the criteria and standards.

Project 1.6.1.1: (Project title: Establishment of task force to review the curriculum)
Goal: (Strategic Goal # 1.6 to be achieved)
Objective: (Strategic Objective # 1.6.1.1 to be achieved)
Strategy: (Actions and Activities supporting Strategy # 1.6.1.1 used)
Project details: (Details and Budget)

Project 1.6.1.2 Details of the project and budget to be used for the training and workshops to train the faculty in the student-centered curriculum and delivery.

Project 1.6.1.2: (Project Title: Student-centered curriculum and delivery workshops for faculty)
Goal: (Strategic Goal # 1.6.1 to be achieved)
Objective: (Strategic Objective #1.6.1.2 to be achieved)
Strategy: (Actions and Activities supporting Strategy #1.6.1.2 used)
Project details: (Details and Budget)

Goal 1.6.2 *The teaching-learning processes must develop qualified graduates*

Objective 1.6.2.1 The school's Student Competency and Effectiveness Index must achieve a 10 % increase annually.

Objective 1.6.2.2 30% of the school's curriculum should use the Student Competency and Effectiveness Index as the minimum standard by 2009; a 100% rate should be achieved by 2012 at all levels of the curriculum.

Strategy:

Strategy 1.6.2.1 To set up an academic task force to lay down the criteria and standards to ensure that the Student Competency and Effectiveness Index is used as the minimum standard in the school and in each of the programs and subjects.

Project 1.6.2.1: (Project Title: Academic task force to define criteria and standards of Student Competency and Effectiveness Index)
Goal: (Strategic Goal # 1.6.2 to be achieved)
Objective: (Strategic Objective # 1.6.2.2 to be achieved)
Strategy: (Actions and Activities supporting Strategy # 1.6.2.1 used)
Project details: (Details and Budget)

Strategy 1.6.2.2 To ensure the Student Competency and Effectiveness Index is measured in the school and in each of the programs and subjects.

Project 1.6.2.2: (Project Title: Measurement of Student Competency and Effectiveness Index)
Goal: (Strategic Goal # 1.6.2 to be achieved)

Objective: (Strategic Objective # 1.6.2.1 and 1.6.2.2 to be achieved)
Strategy: (Actions and Activities supporting Strategy # 1.6.2.2 used)
Project details: (Details and Budget)

Table 7.2: Student Competency Effectiveness Index

Competency and EffectivenessFactor	Operational Elements of each of the Factors
SCEI 1 Students have the knowledge	Discipline Knowledge - Students will possess detailed and comprehensive knowledge of the subject or program of study
SCEI 2 Students have the professional ethics and values	Ethical Attitude - Students will possess a sense of community and professional responsibility and will be able to identify and offer appropriate solutions to ethical dilemmas.
SCEI 3 Students have the critical and analytical skills	Problem Solving and Reasoning - Students will possess critical thinking and problem solving skills, which enable effective analysis, evaluation and creative resolution of legal problems.
SCEI 4 Students are information literate	Information Literacy - Students will be able to use current technologies and effective strategies for the retrieval, evaluation and creative use of relevant information as a lifelong learner.
SCEI 5 Students have the cognitive skills	Cognitive skills - Students will be able critically to evaluate, reflect and communicate and professionally consider options for an appropriate course of action (analytical and critical reasoning).
SCEI 6 Students have interpersonal skills	Interpersonal Focus - Students will be able to work both independently and as a productive member of a team, practice critical reflection and creative thinking, be socially responsible and inclusive, and be able to work effectively and sensitively within the global community in continually changing environments.
SCEI 7 Students can communicate	Communication - Students will be able to clearly, appropriately and accurately communicate both orally and in writing having regard to the appropriate language for a variety of contexts.
SCEI 8 Knowledge Conditioning	Prudence and care in interpretation, integration and application of knowledge,
SCEI 9 Morality Conditioning	Honesty, Integrity, Sincerity, Perseverance, Diligence, Sharing.

Source: Teay (2005); AuQS 2000 QMIPS Curriculum Quality Management System, 1st Edition, 2005 and Teay (2006); "Quality Assurance: Teaching Competency and Effectiveness Index", Proceedings of UPAL Conference, November 2006, Bangkok.

An example of the Student Competency and Effective Index, as previously discussed in Chapter 3, is now used as a performance measure of the students' learning outcomes based on the student-centered approach. The areas to be measure are shown in Table 7.2.

Table 7.3 Worked out Example of School of HEI - SOA: Action Plans for Strategic Goal 1.6 and Strategic Initiatives 1.6.1 to 1.6.3

Strategic Goal 1.6 HEI - SOA will provide its students with a student-centered education that prepares academically them as professionals in their chosen academic fields and as active moral citizens in the global community.		
Strategic Action Initiatives: 1.6.1 Providing student-centric and experience-based learning in content and methodology throughout a student's chosen course of study. 1.6.2 Promoting the development of creative and critical thinking, as well as of oral and written communication skills, that bring out the best in each student. 1.6.3 Supporting student-centric undergraduate research, scholarship, and creative and collaborative projects.		
Responsibility Unit/Person (s): 1. Vice-Dean for Academic Affairs 2. Department Chairs		Time-line: October 2010 - March 2013
Action Plan 1.6.1 Set up task forces at the school and department level and specify roles and responsibilities of task forces, as well as who is accountable for identifying and developing a teaching and learning plan Measurable metrics: Task forces at school and department levels set up by October 2011	Action Initiatives - 1.6.1, 1.6.2 and 1.6.3 KPI: Number of task force established by October 2009	Target 100 % of task forces set up by October 2011
Action Plan 1.6.2 Task forces at school level to define teaching-learning outcomes based on the National Qualification Framework for a Baccalaureate in Arts, Masters in Arts and Doctorate in Arts degree programs Measurable metrics: - 3 task forces set up to determine the teaching-learning outcomes for each of the degree programs by October 2011 - Teaching-learning outcomes for each degree program completed by June 2012	Action Initiatives - 1.6.1, 1.6.2 and 1.6.3 KPI: % increase in courses using student-centric teaching, learning, research and developmental approaches % increase in the number of student-centered works (??) by the students	Target Increase in the progression of the capabilities and competency index by 10% annually Increase the number of student-focused TLR projects by 10% annually

<p>Action Plan 1.6.3</p> <p>Task forces at department level to define teaching-learning outcomes based on the National Qualification Framework for a Baccalaureate in Arts, Masters in Arts and Doctorate in Arts degree programs</p> <p>Measurable metrics:</p> <ul style="list-style-type: none"> - Task forces at department level set up to determine the teaching-learning outcomes for each of the degree programs offered by each department by October 2011 - Teaching-learning outcomes for each degree program completed by June 2012 	<p>Action Initiatives - 1.6.1, 1.6.2 and 1.6.3 KPI:</p> <p>% increase in courses using student-centric teaching, learning, research and developmental approaches</p> <p>% increase in the number of student-centered works by the students</p>	<p>Target</p> <p>Increase by 10% performance achievement annually in each of the measures</p>
<p>Action Plan 1.6.4</p> <p>Task forces at subject level to define teaching-learning outcomes based on the National Qualification Framework for each subject syllabus in a Baccalaureate in Arts, Masters in Arts and Doctorate in Arts degree programs</p> <p>Measurable metrics:</p> <ul style="list-style-type: none"> - Task forces at subject level set up to determine the teaching-learning outcomes for each of the degree programs by October 2011 - Teaching-learning outcomes for each degree program completed by June 2012 	<p>Action Initiatives - 1.6.1, 1.6.2 and 1.6.3 KPI:</p> <p>% increase in courses using student-centric teaching, learning, research and developmental approaches</p> <p>% increase in number of student-centered works by the students</p>	<p>Target</p> <p>Increase by 10% performance achievement annually in each of the measures</p> <p>Increase the number of student-focused TLR projects by 10% annually</p>
<p>Action Plan 1.6.5</p> <p>Workshops organized to develop the student-centered pedagogical skills of faculty</p> <p>Measurable metrics:</p> <ul style="list-style-type: none"> - Number of workshops held in 2010 and 2011 focusing on student-centered pedagogical skills of faculty 	<p>Action Initiatives - 1.6.1 KPI:</p> <p>% increase in the number of workshops organized</p> <p>% increase in the number of student-centered works by the students</p>	<p>Target</p> <p>Increase the number of student-focused workshops and TLR projects by 10% annually</p>

Action Plan 1.6.6	Action Initiatives - 1.6.1 KPI:	Target
Workshops organized to develop skills of faculty in identifying and developing student-centered subject matter that emphasizes bringing out the best in student-centered knowledge and the skills development of students	% increase in the number of workshops organized % increase in the number of student-centered works by the students	Increase the number of student-focused workshops and TLR projects by 10% annually
Measurable metrics: - Number of workshops held in 2010 and 2011 focusing on student-centered subject matter for faculty development		

Table 7.4: Worked out Example of School of HEI - SOA: Action Plans for Strategic Goal 1.6 and Strategic Initiatives 1.6.4 and 1.6.5

Strategic Goal 1.6

HEI - SOA will provide its students with a student-centered education that prepares them academically as professionals in their chosen academic fields and as active moral citizens in the global community.

Strategic Action Initiatives:

1.6.4 Increasing the provision of varied opportunities for cultural and spiritual experiences for total student development.

1.6.5 Integrate technology within the learning process so that students and faculty can improve their teaching-learning productivity and research skills.

Responsibility Unit/Person (s):

1. Vice-Dean for Academic Affairs
2. Department Chairs

Time-line:

October 2010 - March 2013

Action Plan 1.6.7	Action Initiatives - 1.6.4 KPI:	Target
Set up a task force at school level to define opportunities for cultural and spiritual outcomes of a total student for a Baccalaureate in Arts, Masters in Arts and Doctorate in Arts degree programs	% increase in actions and activities for the cultural and spiritual development of students % increase in students' participation in student-centered cultural and spiritual projects	Increase the number of student-focused cultural and spiritual projects by 10% annually Increase the students' participation in cultural and spiritual projects by 10% annually
Measurable metrics: - 3 task forces set up to determine the teaching-learning outcomes for each of the degree programs by October 2011 - Cultural and spiritual outcomes of a total student for each degree program completed by June 2012		

Action Plan 1.6.8	Action Initiatives - 1.6.5 KPI:	Target
Task forces at school level to define integration of technology into student focused teaching-learning outcomes for a Baccalaureate in Arts, Masters in Arts and Doctorate in Arts degree programs	% increase in courses using technology integrated student-centric teaching, learning, research and developmental approaches	Increase by 10% performance achievement annually in each of the measures
Measurable metrics: - 3 task forces set up to determine the integration of technology into student-centered teaching-learning outcomes for each of the degree programs by October 2011	% increase in the number of student-centered works using technology by the students and faculty	

Table 7.5: Worked Example of School of HEI - SOA: Action Plans for Strategic Goal 4.1

Goal 4.1 HEI - SOA advances the research scholarship engagement of the faculty		
Strategic Action Initiatives: Develop a strong and sustainable research system that enhances the research scholarship by: 4.1.1 Recruiting talented faculty (including department chairs), who bring intellectual distinction in research scholarship and who demonstrate commitment to the teaching-learning process through research scholarship. 4.1.2 Increasing grant-supported, research through seed funding providing competitive start-up funds for new faculty and supporting faculty attendance at grant-writing workshops. 4.1.3 Facilitating faculty in balancing their commitment to the dynamic relationship between teaching and research by fostering flexible scheduling and research releases for exemplary faculty, where possible, within programmatic and resource constraints. 4.1.4 Continuing strong support and value research, scholarship, and creative endeavors.		
Responsibility Unit/Person (s): 1. Vice-Dean for Academic Affairs/Research 2. Department Chairs		Time-line: October 2010 - March 2013
Action Plan 4.1.1 Set up task forces at school and department levels and specify roles and responsibilities, together with who is accountable for identifying and developing a college wide and departmental research plan, specifying:	Action Initiatives - 4.1.1, 4.1.2, 4.1.3 and 4.1.4 KPI: Number of task forces established by October 2011 School Research Plan completed by June 2011	Target 100% of task forces set October 2011 School Research Plan completed by June 2011

<ul style="list-style-type: none"> - Research focus of the HEI - SOA - Research policies, processes and procedures applicable across the school - Research committees that will oversee the quality of research, research assessment and approval <p>Measurable metrics: Task forces at school and department levels set up by October 2009</p>	<p>Department Research Plan completed by March 2011</p>	<p>Research Manual specifying policies, procedures and processes completed by June 2011</p>
<p>Action Plan 4.1.2</p> <p>Task force at school level to define balance of teaching workload and research, research funding, research resources and research outcomes for the school and departments</p> <p>Measurable metrics:</p> <ul style="list-style-type: none"> - Teaching and research balance, research funding, research resources, research support and research outcomes identified and developed for each degree program completed by June 2011 	<p>Action Initiatives - 4.1.1, 4.1.2, 4.1.3, and 4.1.4 KPI:</p> <p>% increase in the number of new recruits and existing faculty who bring research distinction to the school</p> <p>% increase in support of seed and grant-funded research</p> <p>% increase in number of journal articles and book chapters published within each unit.</p> <p>% increase in the number and prestige rankings of publications and creative activities.</p>	<p>Target</p> <p>Increase by 10% performance achievement annually in each of the measures</p>
<p>Action Plan 4.1.3</p> <p>Workshops organized to develop research knowledge and skills of faculty in identifying and developing research context, content and methodologies that emphasize bringing out the best in the research scholarships of the faculty</p> <p>Measurable metrics: Number of workshops held in 2010 and 2011 focusing on research development of faculty</p>	<p>Action Initiatives - 4.1.1, and 4.1.4 KPI:</p> <p>% increase in the number of research focused workshops</p>	<p>Target</p> <p>Increase by 10% performance achievement annually in each of the measures</p>

Summary

The frequent failure of strategic planning is that the plan is not properly executed or auctioned, often because linkages with the shorter-term annual operational plan or the medium-term tactical plans are not developed. As such, this chapter offers a worked out example in order to de-mystify both the intricacies and the simplicity of aligning an institution's vision, mission, goals and objectives with those of the schools, departments or programs.

In order for strategic management to be successful, the strategic plan of the HEI or school must be aligned with the strategic plans of the lower-levels units (i.e. those of the departments and the programs). These are then actioned by aligning them with the strategic goals of the HEI and converting them into these units' actionable goals and objectives. These must be set and measured on an annual basis to ensure that the strategies are implemented, checked by measurements and acted upon. This means the following:

1. The strategic plan, which is normally longer-term and spans between five and ten years, must define the position where the HEI aims to be. These longer-term ideals must also be complemented by a set of identified capabilities which must be further enhanced or created to reach the HEI's staked-out position.
2. A Strategic Map must be used to set out the key focus areas so that the lower level units can align their strategic and action plans with those of the HEI or those at a higher level.
3. The development of an actionable one-year-plan and budget, which is the actionable complement to the strategic plan on an annual basis. This means converting the more strategic aspect of the longer-term mission into annual actions, targets and measurements; these represent the "capabilities" to be created in order to achieve the envisioned "position".

Further examples of strategic goals at the HEI level are shown in Table 7.5, with Table 7.6 showing the performance management of continuous improvements based on these strategic goals. Tables 7.7 and 7.8 show the illustrations of the HEI - SOA used throughout the chapter.

In conclusion, it is hoped that this chapter will de-mystify the intricacies of strategic management via its strategic planning mechanism and its alignment and linkage with the actionable annual operation plan and budget.

Last words

This book has been written with three particular aims of:

- a. Applying the strategic management principles used in business to manage a HEI through the application of the strategic management fundamentals in the existing literature.
- b. Simplifying the strategic management framework through the use of the "capabilities and

- position” framework used in this book.
- c. Using the authors’ experience in offering real life examples to show the mechanisms of action on the strategic plan in the later chapters.

It is also recognized that this book cannot cover all the existing frameworks that are being produced by sources such as Blue Ocean Strategies. As such, this book cannot claim to cover all the multifarious frameworks that exist. However, what it tries to do is to consolidate the most widely used frameworks and approaches and to define their applications in the unique world of Higher Education Institutions. Inevitably, due to changes in the fundamentals, many of which have been applied in the business world, of managing an HEI, this has moved from being a uni-disciplinary approach to demanding a multi-disciplinary one. Thus, what has been attempted here is to use the fundamentals of strategic management and develop a framework for managing the HEI strategically. This approach is also intended to be generic although it cannot claim to be a panacea for all the ills confronted in managing the HEI as an organization. Thus, a great many other disciplines that have not been emphasized here but that are equally important, should be used in support of the basic framework proposed here in order “to manage the HEI strategically”. Other key areas, such as organizational behavior, quality management, financial management, operations’ management, education policies etc., should be used to complement this approach to manage the HEI “as a whole and in totality”.

Table 7.5: Worked out Example of Strategic Goals and Action Initiatives, and Defined Metrics of a HEI's Strategic Plan

Strategic Goals	Strategic Action Initiatives	Strategic Outcome Metrics	Champion
P1 1.2 HEI will develop a curriculum meeting the highest standards of excellence across the university.	<ul style="list-style-type: none"> - A comprehensive review of existing programs and external scan will be used to identify programs to be proposed, enhanced or eliminated. - Maintain a program of regular reviews of curricula, educational objectives and teaching delivery by all faculties and departments so that teaching and learning reflect developments in the discipline or disciplines. These must be informed by the highest standards of curriculum design and pedagogy, and meet the requirements of the graduate profiles and the needs of students. - Maintain the breadth and depth of the curriculum, including disciplinary and interdisciplinary studies, within available resources, at the same time eliminating all unnecessary duplication of programs and courses. - Create a plan for regular assessment of student learning outcomes; evaluate current programs for relevancy, effectiveness, efficiency and currency by: <ul style="list-style-type: none"> . Each academic department to identify and demonstrate excellence in one or more areas by setting improvement goals, program and external reviews, assessment of outcomes and available resources by 2010. . Monitoring and assessing quality of an enriched core curriculum based on student learning outcomes by 2012. 	<ul style="list-style-type: none"> - A comprehensive program review plan is developed by all schools by 2010. - Use of the Teaching Competency and Effectiveness Index and the Student Competency and Effectiveness Index in all programs and subjects by 2012. - Faculty and programs meet the minimum CHE and national qualification framework benchmark by 2012. - Annual % increase in the Teaching Competency and Effectiveness Index and Students' Competency and Effectiveness Index by 2012. - Faculty and programs strive to achieve international benchmarks by 2017. 	VPAA, DVP and Deans

Table 7.6: Worked out Example of HEI Strategic Goals and Metrics for Outcomes and Achievement of HEI's Strategic Plan

Strategic Goals	Key Measures	2010 Result	2011 Result	2012 Goal	Unit of Responsibility
P1 1.1 HEI will create a positive learning environment that enables students to achieve their full academic potential and to cultivate their personal development.	1. Stakeholder Satisfaction Index 2. HEI Service Quality Index	3.50 3.51	3.51 3.51	3.50 3.50	VPAA, Deans, Academic Units VP Adm. Directors, Admin. Units
P1 1.2 HEI will create a curriculum meeting the highest standards of excellence across the university.	1. Curriculum Development (inclusive of development, new, accredited and closed)	61/45	45/56 = 80%	70%	VPAA, Deans, Academic Units
P1 1.3 HEI will develop a system for academic advice that will meet the needs of students and lead to academic success.	1. Established Advisory system: - % utilization - % effectiveness	Nil	Nil	80% 50%	VPAA, Deans, Academic Units
P2 1.4 The programs of the HEI will develop students' competencies, knowledge and skills, and effectively prepare them to be competent and ethical citizens.	1. Student Competency and Effectiveness Index 2. Teaching Competency and Effectiveness Index 3. % graduates employment 4. % graduates starting salary 5. National Qualification Framework Plan	Nil Nil 60% 100% Nil	Expectation: 7.88 Perception: 7.45 Variance: - 0.43 Expectation: 8.12 Perception: 7.68 Variance: - 0.44 53% 100% Nil	Expectation: 7.50 Perception: 7.50 Variance: - 0 Expectation: 8.00 Perception: 8.00 Variance: - 0 1% increase Maintain Start initiative	VPAA, Deans, Academic Units Off. Of Stu. Affair Off. Of Stu. Affair VPAA, Deans, Academic Units

Table 7.7: Worked out Example of Strategic Goal 1.6: Actions and Measures of Strategic Thematic Strand 1 of School of HEI - SOA

Strategic Thematic Strand 1: “Enhancing Strategic Directions of HEI - SOA and its departments”				
Strategic Goals	Strategic Actions	Strategic Measures	Target	Responsibility
<p>Goal 1.6</p> <p>HEI - SOA will provide its students with a student-centered education that prepares them academically as professionals in their chosen academic fields and as active moral citizens in the global community.</p>	<p>Develop the KSU - SOA total student by:</p> <ul style="list-style-type: none"> - Providing student-centric problem- and experience-based learning in content and methodology throughout a student's chosen course of study. - Promoting the development of creative and critical thinking as well as of oral and written communication skills that will bring out the best in each student. - Supporting a student-centric undergraduate research, scholarship, and creative and collaborative projects. - Increasing the provision of varied opportunities for cultural and spiritual experiences for total student development. - Integrate technology with the learning process so that students and faculty can improve their teaching-learning productivity and research skills. 	<p>Develop measures of student development through its characteristics and capabilities profile index</p> <p>% increase in courses using student-centric teaching, learning, research and developmental approaches</p> <p>% increase in number of faculty trained and developed in the use of student-centric pedagogical methods</p> <p>% increase in number of student-centered works by the students</p>	<p>Increase in the progression of the capabilities and competency index by 10% annually</p> <p>Increase in number of student-focused TLR projects by 10% annually</p>	<p>Strategic managers of the school and departments</p>

Table 7.8: Worked out Example of Strategic Goal 4.1: Actions and Measures of Strategic Thematic Strand 4 of School of HEI - SOA

Strategic Thematic Strand 4: “Enhancing and Enriching distinguished Social Science and Humanities Research Scholarship”				
Strategic Goals	Strategic Actions	Strategic Measures	Target	Responsibility
Goal 4.1 HEI - SOA advances the research scholarship engagement of the faculty.	Develop a strong and sustainable research system that enhances research scholarship by: <ul style="list-style-type: none"> - Recruiting talented faculty (including department chairs) who bring intellectual distinction in research scholarship and who demonstrate commitment to the teaching-learning process through research scholarship. - Increasing grant-supported, research through seed funding providing competitive start-up funds for new faculty and supporting faculty attendance at grant-writing workshops. - Facilitating faculty to balance their commitment to the dynamic relationship between teaching and research by fostering flexible scheduling and research releases for exemplary faculty, where possible, within programmatic and resource constraints. - Continuing strong support and value research, scholarship, and creative endeavors. 	% increase in the number of new recruits and existing faculty who bring research distinction to the college % increase in support of seed and grant funded research % increase in the number of research-focused workshops % increase in the number of journal articles and book chapters published within each unit. % increase in the number and prestige rankings of publications and creative activities.	Increase by 10% performance and achievement annually in each of the measures	Strategic managers of the school and departments Department and units

Developing and Actioning Strategic Plan in HEI

Assumption University Press

ABAC, Ram Khamhaeng 24 Rd., Hua Mak, Bank Kapi, Bangkok 10240

Tel. 0-2300-4543-62 Fax. 0-2300-4563

www.au.edu abac@au.edu

Developing and Actioning

Strategic Planning in Higher Education Institutions

Copyright 2011, Teay Shawyun
Assumption University Press

ISBN : 978-974-615-051-4