

STRATEGIC PLANNING IN HIGHER EDUCATION: A STUDY OF
APPLICATION IN SELECTED PRIVATE COLLEGES
AND UNIVERSITIES IN BANGKOK, THAILAND

Bancha Saenghiran

M.Ed.
St. Gabriel's Library

STRATEGIC PLANNING IN HIGHER EDUCATION: A STUDY OF
APPLICATION IN SELECTED PRIVATE COLLEGES
AND UNIVERSITIES IN BANGKOK, THAILAND

Bancha Saenghiran

221 Pages

May 1995

This study was to determine the level of institutional application of Strategic Planning as being applied in selected private colleges and universities in Bangkok, Thailand, as related to roles (administrators and faculty) and sizes of the institutions.

APPROVED:

	
Date	Edward R. Hines, Chair
	
Date	Robert Arnold
	
Date	G. Alan Hickrod
	
Date	James Palmer

STRATEGIC PLANNING IN HIGHER EDUCATION: A STUDY
OF APPLICATION IN SELECTED PRIVATE COLLEGES
AND UNIVERSITIES IN BANGKOK, THAILAND

Bancha Saenghiran

221 Pages

May 1995

This study was to determine the degree of strategic planning as actually being applied and as being suggested in selected institutions of higher education in Bangkok, Thailand. Interviews were made with 10 presidents, and survey instruments were distributed to 765 administrators and faculty. The response rate was 72.55%.

The sample groups were divided according to roles (administrators and faculty) and sizes of the institutions (large, medium, and small). Only the administrators and faculty of large and small institutions were studied and compared. The medium institutions, a connecting link in between, were treated to confirm the results.

Modified Strategic Planning Process model was employed. The instrument was developed and tested. It enabled the researcher to determine the perceptions of administrators and faculty in regard to the application of strategic planning in selected institutions in relationship to roles and sizes of the institutions

There was no significant difference in institutional application of strategic planning either perceived by administrators or by faculty and both in actual and

suggested application. On the other hand, in relationship to sizes of the institutions, there were significant differences in institutional application of strategic planning as perceived by administrators and faculty combined and in both actual and suggested application. Institutional Analysis and Strategy Formulation were ranked first and last in institutional application, respectively.

Conclusions were, first, there was an informal application of Strategic Planning in higher education institutions, and second, a higher level of application of Strategic Planning was desirable.

APPROVED:


Date _____ Edward R. Hines, Chair


Date _____ Robert Arnold


Date _____ G. Alan Hickrod


Date _____ James Palmer

STRATEGIC PLANNING IN HIGHER EDUCATION: A STUDY
OF APPLICATION IN SELECTED PRIVATE COLLEGES
AND UNIVERSITIES IN BANGKOK, THAILAND

BANCHA SAENGHIRAN

A Dissertation Submitted in Partial
Fulfillment of the Requirement
for the Degree of

DOCTOR OF PHILOSOPHY

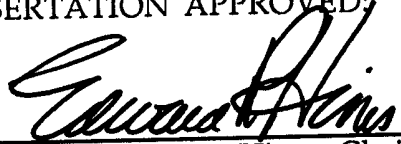
Department of Educational Administration and Foundations

ILLINOIS STATE UNIVERSITY

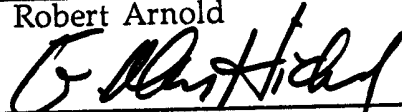
1995

© 1995 Bancha Saenghiran

DISSERTATION APPROVED:


Date _____ Edward R. Hines, Chair


Date _____ Robert Arnold


Date _____ G. Alan Hickrod


Date _____ James Palmer

ACKNOWLEDGMENTS

I wish to thank the many people who contributed their experiences and ideas to the creation of this writing.

First, I would like to thank Dr. Edward R. Hines who consented to serve as Chair of my dissertation committee. His knowledge, expertise, and advice were valuable from the initial research steps through the final writing stage. His patience, dedication and encouragement are attributes of an exemplary professional.

Special thanks are extended to other members of my dissertation committee: Dr. Robert Arnold, Dr. G. Alan Hickrod, and Dr. James Palmer. Through their individual areas of expertise and their own unique ways and techniques of providing advice, they have contributed to my personal growth and improvement.

Dr. Jirawat Wongswadiwat deserves my special appreciation for her help and dedication in validating the instrument and assistance in data gathering and processing. I also thank Dr. Chavalit Meennuch who facilitated the interviews with the presidents of selected colleges and universities.

This dissertation could not have been completed without the help and cooperation of the presidents, faculty, and coordinators of the selected colleges and universities whose names are too numerous to mention here. The experiences and expertise of the presidents and the data provided by the faculty were critical to the study.

My appreciation is extended in a particular way to Dr. Prathip M. Komolmas, the president of Assumption University. In addition to introducing

me to the program, he also provided time and resources on campus for my study.

I am grateful to the Provincial Superior and all the Brothers of St. Gabriel, Province of Thailand for their support and encouragement.

To my father, mother, brothers, and sisters, I express my deepest appreciation. In spite of their silence, they are sources of inspiration and moral support.

I would not have survived the doctoral program without my committee, instructors, family, friends, and colleagues. Their contributions form part of my life and growth and they, too, must share in my success and reward. May the Good Lord bless and keep them prosperous and safe in His Love always!

B. S.

CONTENTS

	Page
ACKNOWLEDGMENTS	i
CONTENTS	iii
TABLES	vii
FIGURES	ix
CHAPTER	
I. THE RESEARCH PROBLEM	1
Introduction	1
Statement of the Problem and Clarifying Components	2
Statement of the Problem	3
Purpose of the Study	3
Definition of Terms	4
Delimitations	5
Assumptions	5
Conceptual Framework	6
Planning as a Tool	6
Need for Strategic Planning	7
Strategic Planning Concept	8
Strategic Planning in Higher Education	9
Strategic Planning Model in Higher Education	10
Significance of the Study	15
Research Questions	15
Overview of Research Methodology	16
Subjects	16
Research Procedures	17
Statistical Design	18
Organization of the Study	19

II. REVIEW OF LITERATURE	20
History of Strategic Planning	20
The Military Origin of Strategic Planning	20
Strategic Planning in Business	21
Strategic Planning in Higher Education	26
Summary	29
The Concept of Strategic Planning	30
Summary	38
Common Elements of Strategic Planning	40
Components of Strategic Planning	41
Formulation of Mission Statement	41
Institutional Analysis	44
External Environmental Analysis	47
Strategy Formulation	51
Organization and Systems Design	54
Implementation and Evaluation	58
Applied Strategic Planning	61
Strategic Planning as Applied by Business Organizations	61
The Application of Strategic Planning in Higher Education	67
Summary	73
Trends in Strategic Planning	74
Summary	78
III. RESEARCH METHODOLOGY	79
Introduction	79
Design of the Study	79
Subjects and Sites	79
Population	79
Sample	80
Sites	80
Instrumentation	81
Interview Instrument	81

Survey Instrument	82
Instrument Testing	84
Data Collection	85
Data Analysis	87
Summary	90
IV. ANALYSIS OF DATA	91
Introduction	91
Characteristics of Respondents	91
Analysis of the Interviews	97
The Interview Results	98
Summary	105
Analysis of the Survey	106
Findings of Research Question One	106
Findings of Research Question Two	111
Findings of Research Question Three	117
Findings of Research Question Four	123
Findings of Research Question Five	129
Summary	140
V. SUMMARY, CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS	142
Overview of the Study	142
Statement of the Problem	142
Purpose of the Study	144
Research Design and Methodology	144
Summary of Findings	145
Research Question One	145
Research Question Two	147
Research Question Three	148
Research Question Four	149
Research Question Five	150
Conclusions and Discussion	151
Strategic Planning as Practiced by the Presidents	151
Perceptions of Administrators and Faculty	153

Common Components of Strategic Planning	156
Interview and Survey Result Differences	159
Link between the Interviews and Survey	166
Limitations of the Study	166
Summary	168
Recommendations	170
Recommendations for Future Research	170
Recommendations for Practice	171
REFERENCES	173
APPENDIX A: Correspondence	186
APPENDIX B: Cover Letter	189
APPENDIX C: Interview Instrument	191
APPENDIX D: Survey Instrument	196
APPENDIX E: Data Tables	206

TABLES

Table	Page
1. Summary of Sample Size and Return Rate	93
2. The Distribution of Administrators and Faculty by Size of the Institutions	93
3. Number and Percentage of Subjects in Large and Small Institutions Classified by Role, Sex, Age, Educational Level, and Place of Education	95
4. Number and Percentage of Subjects in Medium-sized Institutions Classified by Role, Sex, Age, Educational Level, and Place of Education	96
5. T-Test Results (T-values of Paired Samples) of Administrators' Perceptions on Actual Practice for Each Dimension of Strategic Planning	108
6. T-Test Results (T-values of Paired Samples) of Faculty's Perceptions on Actual Practice for Each Dimension of Strategic Planning	112
7. T-Test Results (T-values of Paired Samples) of Administrators' and Faculty's Perceptions on Actual Practice for Each Dimension of Strategic Planning	115
8. T-Test Results between Administrators' and Faculty's Perceptions on Actual Practice of Strategic Planning	118
9. T-Test Results between Administrators' and Faculty's Perceptions on Suggested Application of Strategic Planning	121
10. T-Test Results between Large and Small Institutions on Strategic Planning	124
11. ANOVA Results on Actual Practice and Suggested Application by Size of Institution	127

12. T-Test Results (T-values of Paired Samples) of Administrators' Perception on Suggested Application for Each Dimension of Strategic Planning	130
13. T-Test Results (T-values of Paired Samples) of Faculty's Perception on Suggested Application for Each Dimension of Strategic Planning	135
14. T-Test Results (T-values of Paired Samples) of Administrators' and Faculty's Combined Perceptions on Suggested Application for Each Dimension of Strategic Planning	138

FIGURES

Figure	Page
1. Strategic Planning Process Model in Higher Education	14

CHAPTER I

THE RESEARCH PROBLEM

Introduction

Man learns from the past, prepares for the present, and contemplates the future. But the past, present, and future of yesteryear is diametrically different from those of today. The rate of change is getting faster each day. When Charles Darwin put forth his theory of evolution, "the survival of the fittest," he thought of man as an individual. The concept of the survival of the fittest has since also been applied to families, which are the smallest social units, and to other established organizations and institutions. Modern literature, including The Third Wave by Alvin Toffler (1981), Megatrends by John Naisbitt (1982), and other works, reflects the urgency of what must be done to enable an organization to survive in today's difficult environment. Special measures must be taken to preserve institutions in every field.

Higher education is no exception. Like other kinds of organizations, educational institutions have been buffeted by uncontrollable forces from outside, now more than ever. Echoes of warning signals have been recorded in the literature. Keller (1983) wrote that colleges and universities need changes in planning, and Kotler (1981) agreed that changes in planning were necessary. There is a growing interest in, and concern about, the future, especially in higher education.

In the business world as well as in public institutions, much time and many resources have been used to develop and test new theories for the

sustenance of organizations. Colleges and universities at the present time are struggling to cope with a volatile environment. Administrators must be proactive rather than reactive; institutions as a whole must be innovative and must improve management systems so that the institutions will be able to grow and thrive in changing environments. To cope with the contemporary situation, Kotler and Murphy (1981), Cope (1985), and Drucker (1990) as well as others have strongly recommended the use of strategic planning in both commercial and nonprofit organizations.

As a part of the world community, colleges and universities in Thailand, modeled after the basic European university (Altbach, 1991), have been affected by forces of change, too. For the past 200 years, higher education in Thailand has grown in response to external pressures and influences (Sinlarat, 1987). A laissez-faire attitude about planning applied now would put institutions at risk. There is support in the literature, for example in the major findings of a large-scale survey on changes and trends in planning in U.S. organizations, for renewed emphasis on planning (Eskridge, 1987).

Statement of the Problem and Clarifying Components

Historically, before the existence of the Ministry of University Affairs in 1972, there was no formal higher education administration as such. For studies at this level, it was left to each ministry to manage its own human resources development to serve its own ministry. Chulalongkorn University was the first institution of higher education in the kingdom; it was founded in 1916. Other government universities followed. In 1959, the National Education Council was founded to promote higher education in Thailand. In 1969, there was a promulgation of law to the effect that private institutions of

higher education were permitted to share the responsibility for providing higher education to the high school graduates of the nation (Ministry of University Affairs, 1993). This event led to the successive emergence of private institutions of higher education from that time until today.

Statement of the Problem

The problem of this study was to determine the degree of strategic planning being applied in selected institutions of higher education in Bangkok, Thailand.

Purpose of the Study

Interest in planning, and especially strategic planning, grew steadily at universities in western countries since about 1970. Individual universities undertook strategic planning with varying degrees of intensity and comprehensiveness and with different levels of success. Planning models from business and government had been used frequently, but these often proved inappropriate for higher education.

The purpose of this study was:

1. To determine whether and to what degree components of strategic planning were being employed in selected private institutions of higher education in Bangkok, Thailand, as perceived by administrators and full-time faculty members.
2. To determine the desirability of employing components of strategic planning in selected institutions of higher education in Bangkok, Thailand.

Definition of Terms

The following definitions are provided to help ensure accuracy in communication through common understanding of certain terms used in this study.

Administrators: Administrators are either full-time or part-time employees of an educational institution who hold positions equivalent to department chairpersons or above in the hierarchy.

Faculty: A faculty member is a full-time employee of an educational institution who is not assigned administrative responsibilities but formally obtains permission to teach in colleges and universities from the Ministry of University Affairs.

Strategic Planning: Strategic planning is “the managerial process of developing and maintaining a strategic fit between the organization’s goals and resources and its changing market opportunities” (Kotler & Murphy, 1981, p. 159).

Mission: Mission is “the basic purpose of an organization, that is, what it is trying to accomplish” (Kotler & Andreasen, 1991, p. 71).

Goal: A goal is “a major variable that the organization will emphasize, such as market share, profitability, reputation” (Kotler & Andreasen, 1991, p. 71).

Objective: “An objective of the organization that is made specific with respect to magnitude, time, and responsibility” (Kotler & Andreasen, 1991).

Opportunity: In this study, opportunity is usually used in combination with “market.” A marketing opportunity is “an attractive area of relevant action in which a particular organization is likely to enjoy superior competitive advantages” (Kotler & Murphy, 1981, p. 475).

Threat: A threat is defined as follows: "An environmental threat is a challenge posed by an unfavorable trend or specific disturbance in the environment that would lead, in the absence of purposeful action, to the stagnation, decline, or demise of an organization or one of its programs" (Kotler & Murphy, 1981, p. 474).

Delimitations

This study was delimited:

1. to the 10 private colleges and universities in Bangkok, Thailand, which were selected for this study;
2. to the population of the study, administrators and faculty members, who provided the data for the analysis;
3. to the academic year 1994-95 when the data were gathered.

This study was also subject to the limitations associated with the survey methodology employed in collecting and analyzing the data.

Assumptions

This research was based on the assumptions that:

1. a formalized strategic planning process is vital to the growth and development of private colleges and universities, since they have to function in a rapidly changing environment;
2. the institutions under study would be engaged in some kind of planning process;
3. the survey respondents would be involved in a kind of strategic planning as they completed the survey instruments;
4. the strategic planning process is discernible;
5. observation and occurrence are one and the same.

Assumptions two and three were made on the basis that all private colleges and universities in Thailand operate under the supervision of the Ministry of University Affairs (MUA). The MUA requires that each private higher education institution submit budgeting and financial reporting information. This ensures that some form of formal planning is in use at each institution. Formal planning methods in use may include what might be termed as comprehensive planning, financial planning, long-range planning, or planning for specific objectives.

Conceptual Framework

Planning as a Tool

Management is an organ of an institution; and the institution, whether a business or a public service, is in turn an organ of society, existing to make specific contributions and to discharge specific social functions. . . . (Drucker, 1974, p. 37)

The two tasks of a manager of any institution are, first, "the creation of a true whole that is larger than the sum of its parts, a productive entity that turns out more than the sum of the resources put into it, and second, to harmonize in every decision and action the requirements of immediate and long-range future" (Drucker, 1974, pp. 398-399).

To carry out the responsibilities of a manager, planning is essential. It is a tool through which the tasks of a manager can be accomplished. In the past, an institution or a business was small and simple. Not much entrepreneurial skill was necessary. It was the availability of the products in the marketplace and the capacity within the market to buy that were the forces driving the organization. Moreover, the rate of change was slow and predictable. By contrast, today "organizations grow in size, productive line,

diversity, geographical coverage, organizational complexity, vertical integration; the environmental changes are rapid and often discontinuous; immediate decisions need to be taken and action followed" (Digman, 1990, pp. 17-22). In this information age, information technology affects strategic thinking and planning in an organization (Gerstein, 1987).

Need for Strategic Planning

In the 1960s, "extrapolative planning" was in use. Extrapolative planning was focused on the ability of the organization to pursue various growth opportunities. Planning during this period centered on budgeting. There was a shift in the late 1960s and early 1970s from "extrapolative planning" to "business planning" in response to an increasingly competitive business climate. The emphasis was now on products and services, and the process of planning became one of searching for competitive strengths for an organization and developing plans to position its products and services to take advantage of opportunities in the marketplace. Portfolio planning came in the 1980s during a period of increasing global instability. Portfolio planning stressed an overall strategic resource balance to ensure the organization's survival. All the resources of the corporation, whether financial, technological, human, or material, were taken into consideration in this planning method (Lorange, 1982).

"Planning is as old as civilization" (Keller, 1983, p. 100). It has evolved through time, changing its features and characteristics so that it would continue to be useful as a tool for management. The world in which planning must be applied today, as described by Worth Loomis (1988), is a confusing world:

It's confusing for two reasons: first, because a number of the events that affect the organization are random or beyond control; and second, because the raw stream of information reaching us with reference to all events is massive, unordered, and yet inadequate. For Loomis, a good manager must be able to stand in the middle of this confusing stream of information and select the data that are important, analyze it, and set an appropriate course of action. (p. 14)

There is an urgent necessity for planning to cope with these changes.

Inaba (1988) told how he, as the president of Asahi Chemical Industry America, Inc., succeeded in planning through different phases of change.

Digman (1990) also studied the early studies of planning, indicating that there is a relationship between planning and performance of which strategic planning is a part.

Strategic Planning Concept

There were different models of the strategic planning process in the past. The models employed either a content approach or a process approach (Bryson, Freeman, & Roering, 1986). The strategic planning process comprised the vision of the organization, the translation of the vision into concrete proposals, defining the mission for the business, formulation of functional strategy, and the consolidation of business and functional strategies (Hax & Majluf, 1984).

Some divided the strategic planning into three primary steps of assessment, strategy, and execution (Boar, 1993). Some presented strategic planning as being conducted on intellectual and operational levels (Cope, 1987). Others concentrated on strategy as the essential part in strategic planning (Chandler, 1962; Ansoff, 1965; Steiner, 1979; Whittaker, 1978).

For Cope (1981), “the techniques essential to strategic planning, decision making and management focused on the environment, on the institution, and on the links between the two” (p. 28).

Everyone had their own definition and model of strategic planning. Whatever definition of strategic planning was used, the essential aspect of strategic planning always lay in the decisions made after due consideration of all the factors that might affect the operation of the organization and all the capabilities of the organization. The decisions, once they were made, would be translated into actions to reach the goals and objectives for carrying out the institutional mission. In the process, strategic thinking, strategic decisions, and strategic operations must be used to create a viable match between the organization’s capabilities and opportunities afforded by the environment.

Strategic Planning in Higher Education

An institution of higher education as an organization also needs to adapt itself to its changing environment to be able to survive, grow, and develop. Cyert, in the foreword to Academic Strategy by Keller (1983), mentioned that the 1990s would be a difficult time for American colleges and universities owing to a decreasing number of college candidates, higher costs, fewer openings for faculty members, reduced federal aid to students, and declining support for university research. Cope (1987) presented case examples of successful applications of strategic planning in various institutions of higher education.

College and university planning has evolved through several major stages in the same manner as in business. In order to cope with a changing environment, strategic planning, as another tool for management, has been developed not only to solve institutional problems but also as an effective

means of revitalizing the institution and keeping it dynamic (Kotler & Murphy, 1981; Morrison, Renfro, & Boucher, 1984; Cope, 1987; Kotler & Fox, 1985; Kotler & Andreasen, 1991; Keller, 1983).

Strategic Planning Model in Higher Education

In this study, private colleges and universities were chosen rather than their counterparts in the public sector. The main reason is that public institutions of higher education receive a fixed yearly budget from the government, whereas private colleges and universities in Thailand have to rely on their own resources rather than on help from the government. Moreover, private institutions in Bangkok were chosen since Bangkok, the capital of Thailand, has continued to be the center for education in Thailand up to the present time. Institutions of higher education began a period of increase and expansion in the 1960s and early 1970s, adapting for their own use some of the aspects of colleges and universities in the United States. Private institutions of higher education through the growth period and into the present have had to compete in diverse environments which have created a need for strategic planning.

Kotler and Murphy (1981) defined strategic planning as "the process of developing and maintaining a strategic fit between the organization and its changing marketing opportunities" (p. 471). Cope (1987), in trying to define strategic planning specifically for higher education, gave the following definition:

Strategic planning is an open systems approach to steering an enterprise over time through uncertain environmental waters. It is a proactive problem solving behavior directed externally at conditions in the environment and a means to find a favorable competitive position in the continual competition for resources. Its primary purpose is to achieve success with mission while

27872 e.1

linking the institution's future to anticipated changes in the environment in such a way that the acquisition of resources (money, personnel, staff, students, good will) is faster than the depletion of resources. (p. 3)

The strategic planning model used in this study was composed of six elements formulated as six steps to be taken to improve educational institutions, as follows:

Step 1: Formulation of Institutional Mission, Goals, and Objectives.

Since the mission of the institution is the reason for its existence, then the mission of the institution should be determined first. Mission gives direction to the formulation of goals and objectives and the translation of goals and objectives into concrete actions.

Step 2: External Environmental Analysis. Once mission, goals, and objectives of the institution have been formulated, the institution should scan for external factors that may affect the operation of the institution. Factors to be considered include socio-demographic, technological, economic, and political trends. Cultural and traditional values, especially including changing values that affect the institution, must be considered. The trends, their implications, and the significance of the information to the institution must be noted to help the institution exploit opportunity and avoid threat.

Step 3: Institutional Analysis. After external environmental scanning has been undertaken, the institution should next examine its institutional resources and environment. This means making a review of the organization design, systems, and processes that tie all the members together; as well as the organization's culture, values, beliefs, and tradition. The main purpose of this effort is to find the strengths and weaknesses of the institution.

Step 4: Strategy Formulation. After learning the opportunities and threats that lie outside the institution and the strengths and weaknesses within the institution, the next step is to make use of the institution's experience in strategic thinking. Strategic thinking includes making decisions about the what, when, where, and how of the actions to be taken to reach the goals and objectives of the organization.

Step 5: Organization and Systems Design. In order to translate the strategy decided on in Step 4 into reality, the institution's structure must be designed in such a way that it is fitted to the strategy and the allocation of resources. All the tasks, responsibilities, and resources must be assigned. Other supporting systems and processes necessary must be provided for the efficiency and effectiveness of the operation of the institution. The strategy should fit with the organizational environment, as well.

Step 6: Implementation and Evaluation. As the plans are implemented, measurement and evaluation of the actual performance of the institution is carried out. The effectiveness of a planning system is judged in terms of how well the system fulfills its objectives. The evaluation will be a comparison of actual results to a standard of performance. The standard of performance should not be taken from within the same institution only; instead, it should reflect the best performance of a competitive institution which is a leader in the performance area. This method of establishing standards is the process of arriving at "performance benchmarks" (Digman, 1990, p. 342).

With the founding of new institutions, the formulation of mission and establishing goals and objectives for the institution come in the first step. The assessment of the external environment (Step 2) and the analysis of the

institution itself (Step 3) can be done at the same time. The next step is strategy formulation. It is here that the raw data obtained in Steps 1, 2, and 3 are assimilated. Past experience, personal capability, and intellectual capacity are utilized in the formulation of strategy. Risk-taking is also involved in the decisions made, but it is well-calculated risk which is worth taking. The fifth step, organization and systems design, follows. The implementation of plans arrived at in the previous five steps will be carried out as the final step. That step will include arriving at performance benchmarks and assessing the organization's performance with reference to them. Corrective measures must be taken in connection with the performance appraisal to ensure achievement of desired results. Feedback must be provided at each step, in a process of "double-loop learning" (Argyris, 1933, p. 84); that is, a learning process involving feedback from within and feedback from without.

Once the institution is in existence and has been operated for some time, the six steps in the strategic planning process model are not necessarily employed sequentially. The point of action and examination can be at any step, and sometimes two or three steps must be done at the same time, depending largely on circumstances. A continuous flow, in which the organization is constantly looking into the matters associated with each step, may best enable the institution to cope with changes within and without.

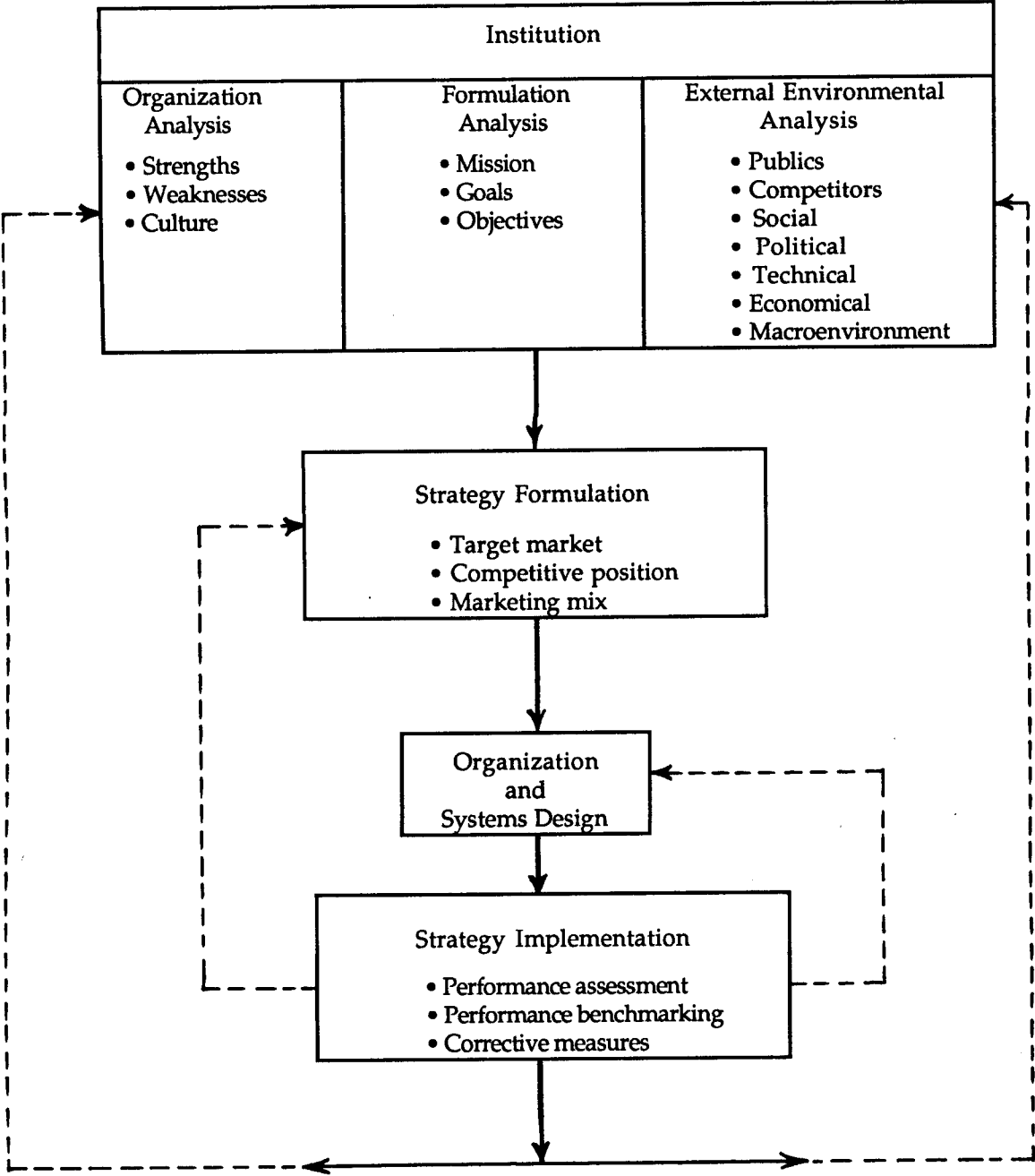


Figure 1. Strategic Planning Process Model in Higher Education. Adapted from Kotler & Andreasen, 1991, p. 69.

Significance of the Study

This study sought to determine whether and to what degree strategic planning or components of strategic planning was being used in selected private colleges and universities in Bangkok, Thailand.

This study had the following implications for planning in private colleges and universities in Bangkok, Thailand:

First, the systematic review of the literature revealed much that could be learned from different strategic planning approaches as they were used to build and improve institutions. This information is valuable to everyone involved in the planning process.

Second, the data obtained from the interviews and questionnaires reflected the perceptions administrators and faculty members have of the strategic planning process as it was used in their institutions. This in turn reflected the relationship between the perceptions of administrators and faculty members and the strategic planning process itself.

Third, the data obtained from the research study indicated the degree to which strategic planning had been applied in the selected institutions.

Fourth, insights into the use of strategic planning in the educational institutions selected for this study could be of use to administrators seeking to improve the use of strategic planning in their institutions.

Finally, the data obtained from this study may be a springboard for future studies in related areas.

Research Questions

The research questions that guided this study include the following:

1. What are the perceptions of administrators concerning the level of priority of institutional application of strategic planning?

2. What are the perceptions of faculty members concerning the level of priority of institutional application of strategic planning?

3. To what extent does the perceived level of priority of institutional application in the strategic planning process vary according to the roles of the respondents?

4. To what extent does the perceived level of priority of institutional application in the strategic planning process vary according to the sizes of the institutions?

5. What common components of strategic planning are perceived to have a priority ranking in the selected institutions of higher education?

- a. As perceived by administrators.
- b. As perceived by faculty.
- c. As perceived by both administrators and faculty combined.

Overview of Research Methodology

Subjects

The study was conducted with 10 selected private institutions of higher education in Bangkok, Thailand. Two types of studies were conducted: in-depth interviews and a survey. In-depth interviews were conducted with the presidents of all 10 selected institutions and a survey of perceived level of priority of institutional application of the strategic planning process was administered to all administrators (vice presidents, deans, and chairpersons or equivalent) and selected full-time faculty members. The sample size was 765 out of which 555 were valid for data analysis comprising 222 administrators and 333 full-time faculty members.

Research Procedures

The president of each selected institution was asked for a half-hour interview to receive permission to administer the survey questionnaire and to request that a coordinator be designated to supply a list of administrators and full-time faculty members to facilitate the distribution and the collection of questionnaires, including the follow-up on non-respondents and replacement of respondents as necessary.

In this first stage, college presidents were thus interviewed using the checklist of questions (see Appendix B) to determine the extent to which formal strategic planning was undertaken in their institutions and to identify the participants involved in the planning process and the planning documents produced.

In the second stage, the survey instrument was administered with all administrators and full-time faculty members. The survey instrument consisted of six components conceptualized by the researcher to be characteristics of strategic planning process developed from the concepts of strategic planning process of various authors using the adapted strategic planning model of Kotler and Murphy (1981) and that of Evans for her 1987 doctoral dissertation.

A packet containing a cover letter (explaining the rationale for this survey and the importance of this participation), a survey instrument, and a return envelope was prepared. The number of packets equal to the sample size in each institution were packed and delivered to the coordinator who in turn facilitated the distribution, follow-up, and collection of the return survey instruments. The listing of administrators and selected faculty members was also provided to facilitate the distribution. Two weeks after the delivery of

the instruments, a phone call was made to each coordinator inquiring about the difficulties met and reminding him of the task. A timeline of three weeks was allowed for the respondents to receive, complete, and return the instruments. The researcher made a personal visit to each coordinator after the third week to help solve any problem arising and took this opportunity to retrieve the first batch of returned instruments. The final collection was made four weeks after the delivery. The total number of returned instruments that could be used in data analysis was 555 (72.55%).

Statistical Design

In-depth interviews were conducted with the presidents of the 10 selected institutions of higher education. To this purpose, a set of questions was prepared by the researcher and revised by three vice presidents of Assumption University.

An opinion survey was also conducted to determine the perceived level of priority of institutional application of strategic planning provided by administrators and selected faculty members. The instrument was pilot tested for its content validity and revised by two university professors as specialists. SPSSX Reliability subprogram was utilized to test its reliability.

The data obtained from the responses in the six areas of strategic planning were tabulated. The following statistical methods were used:

1. For Research Questions 1, 2, 3, and 5, means, standard deviations, and t-tests were utilized.
2. Means, standard deviations, and t-tests were also used with the first part of Research Question 4. Analysis of variance (ANOVA) was used in the second part of Research Question 4 to compare among the large, medium-

sized, and small institutions on actual practice and suggested application of strategic planning as perceived by administrators and faculty together.

Organization of the Study

This study was organized into five chapters. The first chapter provided a statement of the problem of the study and its components. A review of literature related to the historical development of strategic planning, the conceptual meaning of strategic planning, components of strategic planning, the application of strategic planning in higher education, and an overview of the future of strategic planning were presented in the second chapter. Research methodology (including the design of the study, population, sample instrumentation, data collection, and data analysis) was presented in the third chapter. In the fourth chapter, the data were analyzed and the research findings presented. The final chapter provided a summary of the study; findings were discussed and implications for practice, as well as recommendations for practice and future research, were presented.

CHAPTER II

REVIEW OF LITERATURE

This chapter presents a review of the literature related to strategic planning. The discussion includes (a) the historical development of strategic planning, (b) concepts of strategic planning, (c) components of strategic planning, (d) strategic planning as it has been applied in higher education, and (e) comments on the future of strategic planning.

History of Strategic Planning

The Military Origin of Strategic Planning

Our word “strategy” comes from the Greek word “strategos,” meaning “army leader” (Pfeiffer, 1986, p. 501) or “a military general” (Morrison, Renfro, & Boucher, 1984, p. 8). Strategy thus at first meant “the art and science of directing military forces” (Pearce & Robinson, 1991, p. 33).

Evered (1983) aptly explains the military origins of the term “strategy.” According to Evered, most of the early Greek states after 550 BC had a strategos (general officer of the army). Initially, strategos referred to a role of a general in command of an army. Later strategos came to mean the art of the general. By the time of Pericles (450 BC) strategos came to mean managerial skill. By Alexander’s time (330 BC), strategos referred to the skill of employing forces to overcome opposition and to create a unified system of global governance. In the military field, a book or statement on military strategy was written by Sun Tzu in China around 360 BC. In Europe, strategy came

during the time of Napoleonic Wars. Prior to this, the word “strategem” was used to denote a trick by a general designed to outwit or surprise an enemy. After the Napoleonic period, strategy referred to the art of projecting and directing extensive military operations. With the growing complexity and interconnectedness of societies, technology and warfare, nations found it necessary to manage their policies through political, economic, technological, psychological and even religious factors, along with the purely military component.

Henderson (1983) saw three stages in the development of strategy. In its elementary form, strategy could be seen in the cooperative activity of a hunting party trying to capture large game. In the second stage, true strategy appeared when one tribe tried to take over the hunting grounds of another. In the third stage, the concept of strategy was then associated particularly with military operations.

Strategic planning itself evolved when warfare began to be conducted on a large scale and military organizations first needed specialists in planning. Pfeiffer (1986) recorded the adoption of formal, long-range planning in complex organizations not only in the military but also in government and business in the 1800s. In the military context, strategy first evolved as an aspect of man’s struggle for survival. What began as a simple task became increasingly complex in both content and process. Today strategy is a well developed and important aspect of modern warfare.

Strategic Planning in Business

The type of planning business managers have done over the years has shifted along with changes in the kinds of situations they have faced. Before 1850, firms in the United States were typically small, and their business was

conducted by families; very few American businesses needed the services of full-time administrators or required clearly defined administrative structures. Yet Chandler (1962) did find that even before 1850 a very few of the largest American business enterprises had already begun to develop embryonic administrative structures. These larger, more differentiated firms included John Jacob Astor's American Fur Company and Nicholas Biddle's Second Bank of the United States. The state boards of public works and the boards of directors of private corporations also exemplified the trend toward the development of administrative structure.

A formal approach to planning for the future of a business organization was first advocated by Fayol in 1916 and subsequently practiced at the DuPont Company and at General Motors (Makkridakis & Heau, 1987). Before 1916, the success of any firm was considered to be the result of the entrepreneurial abilities of the owner of the firm, as prior to the 20th century business tended to be viewed as proceeding from an entrepreneurial base which did not include a formal management component. From 1916 onward, however, a body of knowledge of management began to accumulate which could be used by managers to help introduce systems into organizations to improve their effectiveness.

World War II was followed by a period of reconstruction of the global economy. McCorkle and Archibald (1982) divided the decades from 1950 to 1980 into three different periods based on the state of the national economy: (a) the 1950s and 1960s were considered an era of growth; (b) the 1970s constituted a transitional period in which growth slowed; and (c) the 1980s represented an era of uncertainty brought on by rapid change.

The evolution of strategic planning has been mapped in different ways based on differences in emphasis among scholars. Hax and Majluf (1984) divided the evolution of modern strategic planning into five stages corresponding to key factors in successive models of management which gained prevalence during the period, namely, budgeting and financial control, long-range planning, business strategic planning, corporate strategic planning, and strategic management.

Pfeiffer (1986), by comparison, described three periods marked by changes in organizational focus from 1890 forward as follows:

1. From 1890 to the mid-1930s, business management was production-oriented. Budgeting and financial control methods were used to plan and monitor the use of resources.

2. From the early 1930s to the mid-1950s, businesses were oriented toward operations management. Organizations became more complex. Long-range planning was used to direct the operations of the firm.

3. From the mid-1950s forward, business was marketing-oriented. "Business policy" was a popular term in the 1960s and 1970s.

Lorange (1982) saw strategic planning as having three developmental stages beginning in the 1960s: First, "extrapolative planning" was used in the 1960s during a period characterized by stability and growth. During this period the focus was on the ability to pursue various growth opportunities. Next came a period of "business planning" during the late 1960s and early 1970s. The emphasis during this period shifted to the positioning of a firm's products and services for responsiveness to social change. Finally "portfolio planning" came as a result of increasing global instability from the late 1970s onward.

The term “long-range planning” was used by Steiner (1979) to describe the system of strategic planning used in the 1960s. Ansoff, Declerk, and Hayes (1976) indicated that business firms began to use strategic planning in the process of organizational management in the 1950s, whereas Cope (1987) stated that strategic planning was “widely assumed to have started in the business community in the 1960s” (p. iii).

Digman (1990) reported that, according to Michael Kami (a pioneer and well-known consultant in strategic planning), as recently as 1952 only two major companies, General Electric and IBM, did any type of formal strategic planning.

Day (1984) divided developments in formal strategic planning in the business world into four phases:

1. Budget-base planning in the 1950s, an extension of budgeting which emphasized forecasts of revenues, costs, and capital needs for the coming year.

2. Long-range planning, which developed in the 1960s and early 1970s in response to steady economic growth.

3. Strategic planning, which was adopted in the mid-1970s as a means of solving the many crises and responding to environmental discontinuities (including the energy crisis, inflation, high costs, and recession) of the period.

4. Strategic management, which developed in the 1980s, in answer to competitive pressures, technological advance, demographic change, and other external environmental change.

Henry (1967) made a study of long-range planning systems in 45 corporations. He considered formal strategic planning systems to have evolved in the United States since the 1940s. In the period preceding World

War II, financial and product planning were formalized as a consequence of business expansion. During the 1950s, expansion accelerated, and planning became a part of each functional area within the organization. Toward the end of the 1950s, specifically in 1959, formal long-range strategic planning and the drawing up of operating plans began to be seen. By 1966, management had begun to give more attention to planning procedures.

Gluck (1986) and his associates divided the development of strategic planning into four stages, namely, financial planning, forecast-based planning, externally oriented or strategic planning, and strategic management (Gluck, 1986).

The process known as "strategic management" appeared in the 1970s, when long-range planning, new venture management planning, programming, budgeting, and business policy were combined into a system to guide management decision-making within an organization (Pearce II & Robinson, 1982).

In Implanting Strategic Management, Ansoff (1984) described four steps in the evolution of strategic management as follows:

1. Strategy formulation came in the late 1950s, and this process was named "strategic planning." Strategic planning was designed as a means for an organization to determine where and how to conduct its future business.
2. The second step (internal analysis) was taken in the 1970s when the importance of adjusting internal capability to accord with changes in the organization's strategy became apparent.
3. The third step came in the late 1970s. The adjustment of internal resources to external environment was considered in response to rapid, unexpected, and discontinuous change in the business environment.

4. The fourth step (strategic management) came as organizational resistance developed in response to attempts to introduce strategic planning into organizations.

From the first appearance of the concept of strategy in a military context in 500 BC (Cope, 1987), strategic planning has matured into an important business concept which has branched into a variety of applications and models. Taylor (1987) described five main models of strategic planning developed over time: (a) central control system; (b) framework for innovation; (c) strategic management; (d) political planning; (e) futures research.

Strategic Planning in Higher Education

Cyert (1981) has stated that “despite the fact that management-science was born in academia, university managers have been slow to apply the techniques to the problems of their institutions” (p. 27). One of the many reasons was that colleges and universities are different from other kinds of organizations, particularly with respect to their essential purposes. Colleges and universities exist to provide teachers, scholars, and students with the resources needed for learning to take place. “These pursuits are diverse, often individualistic, and not very amenable to management or control” (Kauffman, 1990, p. 106).

In higher education, as in business, however, there have been attempts to adapt strategic planning to the management purposes of the organization. In the post-World War II years and continuing to the mid-1960s, institutions of higher education in the United States underwent a period of expansion. In Hammon’s words, “their enrollment grew, campuses expanded, faculty and staff grew in size and influence, and long-term debt increased” (1984, p. 364).

Cameron (1983) described this period of growth in higher education similarly as taking place during the 1950s, 1960s, and early 1970s. He indicated it was typical for colleges and universities to expand physical plant facilities and programs during this time. The focus was on efficiency and on internal resource allocation.

Strategic planning became a fashionable topic in academic organizations in the 1950s and 1960s (Makridakis & Heau, 1987). Strategic planning, as a process, was widely employed and received increasing emphasis during the 1980s (Cope, 1987; Stockman & Lewis, 1990; Holdaway & Meekison, 1990; Keller, 1983). In higher education, according to Schmidtlein and Milton (1988-89), strategic planning came into existence in the late 1960s as a result of a general decline in the population of college students, increasing competition for fiscal resources, wavering public confidence in higher education, and other aspects in higher education. Many administrators began at this time to pay attention to the formal planning and management approaches which had been developed in governmental and corporate settings. By 1977, the use of planning techniques was widely urged for administrators, and the use of rational planning models in colleges and universities was becoming increasingly common. A new approach, strategic planning, then became the most widely advocated planning approach for institutions of higher education.

Keller (1983) painted a somber picture of the conditions America's colleges and universities would face in 1990: a rising consumer price index, fewer high school graduates, higher costs, and reduction of federal aid to students. He suggested that strategic planning be used to help solve these problems.

Heydinger considered strategic planning in higher education to be the fourth phase in the evolution of institutional planning (after budgeting, specification of goals and objectives, and forecasting) (Holdaway & Meekison, 1990).

Cope (1981) gave a more detailed history of strategic planning in higher education. By this account, Schendel and Hatten seemed to be the first American authors to mention the possibility of applying strategic planning in institutions of higher education. Others, including Orton and Dorr, Lynch, and Ellison, soon endorsed this idea. Cope also said that the National Center for Higher Education Management System (NCHEMS) and the Resource Center for Planned Change at the American Association of State Colleges and Universities had made early efforts to develop the concept further.

According to St. John (1987), before 1970 the literature on administration in higher education showed a preoccupation with governance, and the field of higher education management had not yet emerged. In the early 1970s, however, financial crises turned many administrators toward systematic approaches to management. St. John (1987), while associating the gradual evolution of planning methodologies in higher education with the development of those techniques within a single institution, described four cumulative stages of evolution as follows:

1. The first stage of planning methodology in higher education focused on facilities and program planning as essential to the founding and renewal of institutions.
2. The second stage of planning methodology added long-range and master planning as important in building the capacity of institutions to deliver educational services.

3. The third stage in planning methodology emphasized systems approaches and often integrated planning and management methodologies to improve management capability.

4. The current stage of planning methodology for higher education incorporates strategic approaches stressing the use of planning and policy analysis techniques for improved institutional decision-making.

Often the use of strategic planning techniques in academic setting has come as a response to turbulence in the environment. Strategic planning has matured in response to pressures from inside and outside educational institutions. From its inception as a simple model for problem-solving and decision-making, strategic planning has evolved into a more versatile and flexible approach. Instead of leaving "the direction of institutional growth and development to be swept along by events," institutions can use strategic planning to help achieve the control described by Marvin Bower as "the will to manage" (Merson & Qualls, 1977, p. 71).

Summary

Key developments in the history of strategic planning revealed by a review of the literature include the following:

1. Strategic planning has evolved and changed in emphasis over time in response to changing circumstances.
2. Strategic planning came into existence not as a developed entity but as a synthesis of ideas from areas such as policy analysis, marketing, and effectiveness evaluation, forged in university schools of management (Miller, 1984).
3. Most writers in the field developed their own definitions of key terms in strategic planning (Steiner, 1979) to suit the situation and the time.

4. The periods into which development of strategic planning has been divided differ from one historical account to another, as well, although there are overlaps. Ackoff (1981) noted that "no age has a starting point: it emerges imperceptibly in bits and pieces that eventually combine, first to produce an awareness that something fundamental is happening, then to provide a new world view" (p. 13). The nature of the developmental stages described by various authors is more constant.

5. The knowledge of the origins and development of strategic planning may enhance understanding of the theoretical framework of strategic planning and its potential for further application.

The Concept of Strategic Planning

"Confucius is reputed to have said that if he were made ruler of the world the first thing he would do would be to fix the meaning of words because action follows definition" (Steiner, 1979, p. 12).

This observation was made by George A. Steiner in his book, Strategic Planning: What every Manager Must Know (1979, p. 12). In strategic planning, there seem to be as many terms and definitions as writers, and there is also considerable ambiguity in terminology. Sometimes the word "strategy" is used to mean "complete strategic plan" (Boar, 1993, p. 9). The terms "corporate planning," "long-range planning," "strategic planning," "formal planning," and "planning" are used interchangeably by some authors; others use each term to mean something different (Capon, Farley, & Hubert, 1987; Lorange, 1982). As Ensign and Adler (1985) observed, there is evidence of a general lack of shared language related to business policy.

As a pioneer in the field of strategic planning, Chandler (1962) defined "strategy" as "the determination of the basic long-term goals and objectives of

the enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals" (p. 13). The concept of strategic planning embodied in the definition reflects in part the economic conditions of the 1960s, a period of stability and rapid growth (Lorange, 1982). Chandler regarded strategic planning as directed toward the making of administrative decisions concerning allocation of resources and actions to be taken to achieve particular goals and objectives of the organization. Chandler (1962) distinguished two types of administrative decisions: strategic, involving allocation of resources for future growth, and tactical, involving the use of resources already allocated. This same idea of strategic planning has been shared by Anthony (1965) and Ansoff (1984), among others.

Andrew (1971) defined strategy as follows:

Strategy is the pattern of major objectives, purposes, or goals and essential policies and plans for achieving those goals, stated in such a way as to define what business the company is in or is to be in and the kind of company it is or is to be. (p. 28)

This definition seems to be broader in that it suggests a way to formulate plans and policies and project a manner of implementation. In addition, the futurity of these organizational decisions is highlighted.

Toward the end of the 1970s, Drucker (1974) added another element. Drucker focused on the entrepreneurial decisions made in the process of strategic planning. These entrepreneurial decisions are made with risk, but they are systematic in nature. Drucker states:

Strategic planning is the continuous process of making present entrepreneurial (risk-taking) decisions systematically and with the greatest knowledge of their futurity; organizing systematically the efforts needed to carry out these decisions; and measuring the results of these decisions against the expectations through organized, systematic feedback. (p. 125)

“The essence of formal strategic planning,” according to Steiner (1979), “is the systematic identification of opportunities and threats that lie in the future, which in combination with other relevant data provide a basis for a company’s making better current decisions to exploit the opportunities and to avoid the threats” (p. 14). He defines formal strategic planning as having four important aspects:

1. Strategic planning deals with the futurity of current decisions.
2. Strategic planning is a process.
3. Strategic planning is also an attitude, a way of life: those involved must have faith in its effectiveness and implement it with dedication.
4. Strategic planning links the three major types of plans: strategic plans, medium-range programs, and short-range budgets and operating plans.

In the 1980s, a shift could be observed in the literature in the conceptualization of strategic planning. Ensign and Adler (1985) noted two predominant forces that effected this development in management techniques: (a) uncertainty and instability in the environment and (b) intense global competition. The idea of competitive advantage, gained by choosing to compete only in those areas in which victories would be clearly achievable, was thought to offer the best general approach for achieving sustained business success. The discontinuous changes in the environment were the common phenomena which shaped scholarly thinking about strategic planning during this period (McCorkle & Archibald, 1982). Andrews (1987), improving on his earlier definition of strategic planning, stated:

Corporate strategy is the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, and defines the range of business the company is pursuing, the kind of economic and human organization it is or intends to be, and the nature of the economic and noneconomic contribution it

intends to make to its shareholders, employers, customers, and communities. (p. 13)

This new definition incorporates a deviation from the conception of strategic planning embodied in Andrews' earlier (1971) definition. Instead of referring only to internal matters in the organization, the responsibility of the firm also had begun to be seen as extending to its constituent groups and those affected by its products and services. The two main subprocesses involved in this change were strategy formulation and strategy implementation, with determination of purpose becoming the key to guiding the organization. Andrews listed six elements of this approach: (a) recognition of a problem; (b) designation of responsibility for inquiry; (c) interviews with line and staff managers; (d) staff examination of strategic alternatives; (e) strategic review conference; and (f) approach to final decision.

Morrison, Renfro, and Boucher (1984) presented another approach to strategic planning involving three developmental stages, namely, (a) the use of extrapolative methods in support of long-range planning focused on surface indicators, (b) trend-impact analysis, and (c) changing values and attitudes.

Traditional approaches to long-range planning developed from an internal perspective made possible by a stable environment. Today, external factors impinging on the organization continuously affect the workings of the organization's internal systems. To cope with the impact of a more volatile environment, traditional long-range planning, which proceeded from an internal perspective, needed to be merged with environmental scanning, which emphasized the role of external forces. The resultant strategic planning process would thus have two basic components: (a) the external perspective, with such key considerations as the organization's mission, the clientele

served, and emerging issues in the external world; and (b) the internal perspective, which would focus on such considerations as number of students and salaries of faculty and staff. This more comprehensive planning could proceed through six stages: (a) environmental scanning, (b) evaluation/ranking of issues, (c) forecasting, (d) goal setting, (e) implementation, and (f) monitoring.

A concept of strategic planning similarly acknowledging the primacy of the interface between organization and environment was developed by Peterson (1980). In Peterson's approach, the primary purpose of strategic planning was

... to foster institutional adaption by assuring congruence between an institution and its relevant and often changing environment, by developing a viable design for the future of the institution, by modifying it as needed, and by devising strategies that facilitate its accomplishment. (p. 140)

Peterson's emphasis was thus on the institution's continuous adaptation to changes in the operating environment. Four key elements of strategic planning were mentioned: (a) environmental assessment or scanning, (b) institutional assessment, (c) values assessment, and (d) creation of a master plan. The purpose of the fourth element, the master plan, was to devise a strategic pattern, design, or direction for the institution that would be based on the first three elements.

It was during the 1980s that higher education began to suffer a decline, and strategic planning was tested seriously. Cyert (1981) suggested two competitive focal points in strategic planning: the first was the concept of comparative advantage (the strengths of the organization), and the second was the concept of "nich" (the section of a market that the organization would seek to develop) (p. 35).

Kotler and Murphy (1981) used similar concepts in their definition of strategic planning: "Strategic planning is the process of developing and maintaining a strategic fit between the organization and its changing marketing opportunities" (p. 471). Kotler and Fox (1985) later improved their presentation of the process by adding more concrete steps toward the goals. They defined strategic planning as follows:

Strategic planning is the process of developing and maintaining a strategic fit between the institution's goals and capabilities and its changing marketing opportunities. It relies on developing a clear institutional mission, supporting goals and objectives, a sound strategy, and appropriate implementation. (p. 73)

Kotler has three main emphases: clear goals for the organization (and clear subunit goals and objectives), good strategic fit, and effective implementation.

Kotler observed three levels of planning in use in education: budgeting and scheduling, short-range tactical planning, and strategically oriented long-range planning. Kotler and Murphy recommend that formal planning of two types (strategic and tactical) be used by educational institutions.

Kotler and Murphy (1981) suggested six steps that an educational institution should take in planning: (a) environmental analysis, (b) resource analysis, (c) goal formulation, (d) strategy formulation, (e) organization design, and (f) system design.

Lewis (1983) considers strategic planning more dynamic than other kinds of planning such as problem-solving and operational planning. According to Lewis, "Strategic planning is the process of realizing the institution's mission, long-range goals, and strategies governing use of human and nonhuman resources needed to achieve the mission" (p. 10).

Cope (1987) offered another approach to strategic planning. To Cope, the essence of strategic planning is in the "direction finding" (p. 3) of the

organization in relation to the ecosystem. Cope's strategic planning process model is in two parts. The first part consists of analysis of the environment to enable perceived strengths of the institution to be matched appropriately to anticipated opportunity. The second part consists of the implementation of the strategy thus arrived at by arraying the internal resources of the institution to achieve optimum results. Cope (1987) thus sees strategic concepts as directing and shaping the enterprise: strategic planning is strategic formulations put into action by strategic implementation.

The essential elements of strategic planning are described by Cope as follows:

Strategic planning is an open system approach to steering an enterprise over time through uncertain environmental waters. It is a proactive problem-solving behavior directed externally at conditions in the environment and a means to find a favorable competitive position in the continual competition for resources. Its primary purpose is to achieve success with mission while linking the institution's future to anticipated changes in the environment in such a way that the acquisition of resources (money, personnel, staff, students, good will) is faster than the depletion of resources. (p. 3)

Pfeiffer (1986) defined strategic planning as "the process by which an organization envisions its future and develops the necessary procedures and operations to achieve the future" (p. 2). This definition is short, but it includes the core elements of strategic planning.

In the early literature, most of the definitions of strategic planning tended to be descriptive. As development has occurred, the working definitions have taken on normative aspects. In complex situations, specialization in strategic planning has been found to be necessary. Its concept and model used should have clear components and steps, designated by precise terms.

Hofer, Murray, Charan, and Pitts (1984) explored two broad areas of concern in the field of strategic management, the strategic management process and the general management of the organization, beginning with the following definition:

Strategic management is the process that deals with fundamental organization renewal and growth, with the development of strategies, structures, and systems necessary to achieve such renewal and growth, and with the organizational systems needed to effectively manage the strategy formulation and implementation processes. (pp. 6-7)

Five major activities make up the strategic management process suggested to achieve organizational goals: (a) goal formulation; (b) strategy formulation; (c) strategy evaluation; (d) the design of macro-organizational structure, systems, and processes; and (e) strategic control.

Another broad definition encompassing all the norms of strategic planning is that presented by Pearce II and Robinson (1991): "Strategic management is the set of decisions and actions that result in the formulation, implementation, and control of strategies designed to achieve the objectives of an organization" (p. 1). Pearce II and Robinson (1991) suggest the following activities as appropriate in strategic management:

1. determination of the organization's mission;
2. assessment of resources and capabilities;
3. analysis of the external competitive environment;
4. assessment of strategic options;
5. determination of long-term objectives and master strategy;
6. development of short-term objectives;
7. development of annual and functional strategies and operational policies;

8. design of implementation strategies employing budgeted resource allocation;
9. matching of tasks, people, technologies, and reward systems;
10. development of monitoring and control systems to gauge strategic performance.

The steps enumerated by Pearce II and Robinson were designed to organize the process to avoid duplication of effort and resulting confusion and ineffectiveness.

Summary

Various definitions of strategic planning and related terms, along with suggested strategic planning processes, have been developed over time in an attempt to make clear how strategic planning (and its related concepts) can best be understood, and what its implications are. Some definitions are more detailed than others, but there are commonalities. Differences in emphasis can be used to group definitions of strategic planning into three principal phases.

The first phase began in the 1960s, with the earliest writers in the area of strategic planning (such as Chandler [1962] and Ansoff [1984]), who emphasized formation of goals and objectives, together with the action plans and resource commitments needed to achieve those ends (Schendel & Hofer, 1979). In the second phase, beginning in the 1970s, the emphasis shifted to the operating environment. Models of strategic planning focused on the relationship between institutional resources and the external environment, although they continued to incorporate the features of earlier models. In the third period, beginning in the 1980s and continuing through the present, the trend in strategic planning has been toward more clearly specifying the

component parts of the strategic planning process, including strategy formulation, strategy implementation, and (a later development) strategic management.

The main purpose of strategic planning, of course, is to bring about the growth and development of the organization. The earlier conceptions of strategic planning were geared toward conditions prevalent at the time they were developed. Planning evolved from the time of the golden age of planning for slow growth (in the 1950s, the 1960s, and early 1970s), through planning for financial stringency (in the late 1970s), through planning for uncertainty (in the 1980s). In the 1990s, the emphasis was on strategic planning of a dynamic nature. That is, strategic planning should not be static or confined to reacting or responding to external events; instead it should be proactive. As it applies to educational institutions, strategic planning should make it possible to lead the institution in the desired direction within current limitations.

The concept of strategic planning can be thought of as comprising two main parts, one intellectual or analytical and one administrative or managerial. Activities involved in the first part include assessment of the internal and external environment; analysis of institutional resources; assessment of values, beliefs, and traditions; and formulation of strategy to match organizational strengths with opportunities to achieve goals and avoid threats. *All of these activities must be done under the umbrella of the organization's mission statement.* The managerial or administrative aspect of strategic planning includes organization and systems design, coordination of different units, and other administrative tasks required to achieve organizational goals.

Common Elements of Strategic Planning

Different authors developed different components of strategic planning, depending on the author's viewpoint, the time of writing, and the kind of organization in which the model was intended to be used. "There is no such thing as the strategic planning system, which every organization should adopt" (Steiner, 1979, p. 12). The term "strategic planning" is something of a misnomer. Some writers have considered the meaning of strategic planning to cover only strategic formulation. Others regard strategic planning as encompassing the complete process of strategic formulation and strategic implementation. Basic components of strategic planning of Schmidtlein and Milton (1988-89), Gup (1986), Whittaker (1978), and Ensign and Adler (1985) are examples of the first kind; while Thompson and Strickland III (1992), Boar (1993), Pearce II and Robinson (1982), and Dube and Brown (1983) are examples of the second.

In spite of the differences in definition, common elements can be found in most of the models. These include (a) goal formulation, (b) environmental scanning, (c) assessment of institutional resources, and (d) formulation of strategy. The process of strategic planning can be thought of as involving a continuous cycle of activities constantly adjusting itself according to information received. The planning process is dynamic. Assuming an organization is getting accurate information from within and without, and its top management is able and trustworthy, strategic planning should provide the means for the organization not only to survive turbulent times but to be able to grow and develop (Kotler & Fox, 1985).

Components of Strategic Planning

A working definition of strategic planning may be helpful in organizing the discussion of components that follows:

Strategic planning is a continuous process of searching for information both inside and outside the organization being knowledgeable of opportunities and threats, strengths and weaknesses, so that decisions about organizational adjustments in time, process, and contents, can be made in such a way that the organization remains fit and achieves goals and objectives with optimum results.

The main emphasis in strategic planning is the ability to achieve a “strategic fit” (Kotler & Murphy, 1981, p. 471) between the institution’s goals and capabilities and its changing marketing opportunities (Schendel & Hofer, 1979). This definition of strategic planning suggests that an effective educational institution must take the following steps, in some form or another: First, the institution determines its mission, formulates its objectives and goals, and ensures that the organizational culture will support them. Second, the institution assesses its strengths and weaknesses. Third, the institution analyzes the external environment. Fourth, the institution formulates a strategy for deciding on current and future programs and projects. Fifth, the institution analyzes and determines organizational structure and systems required. Sixth, the institution executes the plan by implementing its plans, evaluating the results, adjusting as required by the results of the evaluation, and controlling the process throughout.

Formulation of Mission Statement

Every organization must have a rationale or reason for its existence; otherwise, there is no overall purpose in the organization. This purpose or

reason for existence is set forth in the mission statement. The mission is the starting point of any organization.

The mission statement, according to Steiner (1979), is designed by an organization to identify the aim or thrust of that organization, usually expressed at different levels of abstraction and stated in product and market terms. The importance of mission is seen in the information of the company about its competitive areas, allocation of resources, and the size of the company in accomplishing the mission. To fulfill its mission, an organization must translate it into actions through objectives and goals. For Steiner(1979), mission stands at one end of a continuum with short-range goals at the other end, while objectives lie between those two extremes.

Merson and Qualls (1979) used the terms "mission statement," "goals," and "objectives." The purpose of the mission statement is to determine the most general aims and strategies. The mission statement thus becomes the basis of subsequent planning steps.

Mission also delimits the range of services to be provided. Goals are developed as an intermediate step in translating the mission statement into short-term objectives. Goals may be understood as being stated in general, nonquantitative terms, and as covering a period of at least 5 to 10 years. Objectives are written to translate goals into specific operating plans to achieve results capable of being measured.

Whittaker (1978) used the terms "goals" and "objectives" synonymously (p. 35). There is some confusion in the way these terms are used in the planning literature. According to Morrison, Renfro, and Boucher (1984), most authors treated objectives as nonquantitative, long-range, and time-based. Objectives were more general than goal statements.

In contrast, Fenske (1980) stated that the term "goal" was often used interchangeably with function, purpose, mission, objective, role, scope, and aspiration. Although there was no general consensus about these terms, there seemed to be a clustering of usage. The concept of "goals" was viewed as intermediate in a hierarchy between more general missions on the one hand and more specific objectives on the other.

A mission statement may begin with the beliefs, desires, and aspirations of an individual who wants to do something. These can be expressed in a statement of attitude, outlook, and orientation. The organization's basic product or service, the primary market, and the principal technology to be used in producing or delivering the product or service are the three indispensable components of a mission statement (Pearce II, Robinson, & Roth, 1987; Kotler & Andreasen, 1991).

An organization "should strive for a mission that is feasible, motivating, and distinctive" (Kotler & Andreasen, 1991, p. 72). For a mission to be successful, the institution must look at its own strengths and performance and the opportunities outside. In writing its mission statement, the organization must be sure it reflects "what we (members of the organization) really believe in" (Drucker, 1990, p. 7).

Some observations can be made with respect to the discussion of mission statement, goals, and objectives. Many institutions do not have a formal, written mission statement. Absence of a mission statement does not mean that an organization is aimless. If the vision of that organization is shared among its members and regularly reinforced, then the organization may be said to have a mission. By contrast, if an organization possesses a beautifully written mission statement, goals, and objectives, but its members

do not endorse them or put them into action, then they will be of little use, and the organization will suffer ultimately. Mission statements, goals, and objectives must be in congruence with one another; they should all be moving in the same direction.

For the purpose of this study, the meanings of the terms “mission statement,” “goals,” and “objectives” will be taken in order from abstract and general (“mission”) to concrete and specific (“objectives”), with goals representing an intermediate step. The definitions of these three terms, as proposed by Kotler and Andreasen (1991), will be used in this study as follows:

Mission: The basic purpose of an organization, that is, what it is trying to accomplish.

Goal: A major variable that the organization will emphasize, such as market share, profitability, reputation.

Objective: An objective of the organization that is made specific with respect to magnitude, time, and responsibility. (p. 71)

Institutional Analysis

An institution that understands its own character, resources, and mission is in a better position to respond by setting goals and objectives and developing an appropriate marketing program (Kotler & Fox, 1985). That is the reason institutional analysis is an element in strategic planning. The main purpose of institutional analysis is for managers and administrators to identify the resources (human, financial, facilities, technologies) available in the institution. Knowing how abundant particular resources are can be important in making effective strategic decisions about when, where, and how the institution should allocate those resources (Kotler & Fox, 1985).

Peterson (1980) commented that institutional assessment had been done for many years only in terms of accreditation, program review, or institutional operating reports. This was unfortunate, as the accreditation

report was typically not very useful to the organization itself because of organizational deficiencies.

Stevenson made the first formal study of practices in defining organizational strengths and weaknesses as part of the strategic planning process (Andrews, 1987). Although the traditional concept of resources was man, money, and management, Kotler and Fox (1985) used a broader approach by considering both the "tangible" (facilities, staff, money) and the "intangible" (good reputation, long history, traditions) resources of an institution (p. 116). Most of the writers in this area regarded understanding strengths and weaknesses as the main purpose in institutional assessment (Taylor, 1987; Eskridge, 1987; Kotler & Murphy, 1981; Cope, 1987).

King and Cleland (1987) criticized traditional approaches to the assessment of strengths and weaknesses. They proposed an approach based on six practical steps, as follows:

1. Managers including top management must be directly involved in planning.
2. Assessment of strengths and weaknesses must be an integral and useful element of strategic planning.
3. The results of the assessment of strengths and weaknesses must be in the form of strategically useful information, and not merely data.
4. Information about strengths and weaknesses should not be confined to facts and figures. Perceptions of strengths and weaknesses were also essential.
5. The assessment of strengths and weaknesses should go beyond statistics and historical descriptions of the institution. Assessment must also involve predictions of potential.

6. Strengths and weaknesses of any institution must also be assessed relative to those of competitors.

Institutional assessment is performed for the purpose of learning the strengths and weaknesses of the institution as a prerequisite for making strategic decisions. In this regard, Kotler and Fox (1985) proposed several aspects of the organization that should be considered:

1. Institutional environment. The institutional environment is the unique character of the institution that has evolved through time. Relevant aspects include the institution's founders, its history, its geographical location, its size, the local climate, the success of the founding institution, and the match between the institution's offerings and its markets.

2. Institutional life cycle. An institution may be characterized as being in a particular point in its life cycle (for example, in a period of growth, maturity, or decline). An educational institution should make an attempt to assess the organization's position in its life-cycle, and in doing so it should make reference to its potential for continued adaptation, since adaptability may help prolong each phase or produce new life cycles.

3. Potential for adaptation. An institution must be able to adapt to changes in its environment. Large institutions tend to be slow in responding to exterior changes. Kotler and Fox (1985) aptly define "an adaptive institution" as "one that operates systems for monitoring and interpreting important environmental changes and shows a readiness to revise its mission, goals, strategies, organization, and systems to be maximally aligned with its opportunities" (p. 119).

4. Tangible resources and marketing assets. An institution needs to identify its strengths and weaknesses so that strategic decisions can be made to

pursue those goals that relate to opportunities outside and strengths within. At the same time, the institution should avoid moving into areas where its resources are too weak. The institution should pay special attention to its distinctive competencies (resources and abilities of distinctive strength) and to areas of differential advantage (where the institution can outperform competitors). The institution also should listen to the opinions and perceptions of outside constituents.

In this study, institutional assessment included five elements:

1. institutional environment, including beliefs, values, aspirations, customs and traditions;
2. all the tangible resources available in the institution, including income, cash, and in-kind goods;
3. intangible resources such as past success and public image;
4. the development of the institution's potential, or its capabilities;
5. factors internal to the institution.

External Environmental Analysis

The word "environment" may mean different things in different contexts. According to Webster's Ninth New Collegiate Dictionary (1991), one meaning of environment is "the aggregate of social and cultural conditions that influence the life of an individual or community" (p. 416). In the field of education, environment has often been defined in the literature as the internal social climate of the institution, while in organization theory, it typically refers to the external environment any organization faces (Hearn, 1985).

In this study, "environment" means the external environment, and the terms "environmental assessment," "environmental scanning," and

“environmental analysis” are used interchangeably. According to Aguilar (1967), environmental scanning is “the activity of acquiring or scanning for information about events and relationships in a company’s outside environment in its task of charting the company’s future course of action” (p. 1). Aguilar (1967) divided environment into the external and the internal environment. The external environment as analyzed by Aguilar comprises four aspects: the economic, technological, political, and social surroundings. Gathering information on the external environment is considered essential to the assessment phase of strategic planning. When members of an institution are aware of changes outside, they are better able to keep the institution in tune with the outside world while steering it in the desired direction (Clagett, 1988-89). Clagett (1988-89) divided outside elements into six factors, namely, demographic, economic, legal-political, organizational-competitive, socio-cultural, and technological.

Lorange (1982) presented the environment as an outside force that is the cause of all the problems confronting an organization. He specified major environmental trends as scarcity (shortage of natural resources), politics, attitudes (changing values), power shifts (changing roles), and technology. He also described changes in these trends as “turbulent, aggressive, adverse to industrial rationality, endlessly changing, elusive, and unforeseeable” (p. 62).

Cope (1987) defined the outside environment simply as “everything outside the institution, or the outward-looking character, what is ‘out there’” (p. 69). “Situation audit” is the term coined by Steiner (1979, p. 122) to mean review of both the internal and external environments.

With respect to nonprofit organizations, Olenic and Olenic (1991) defined the term “operating environment” in the broadest terms to include

everything external to the organization that potentially affects its functioning.

The environment includes the following factors:

1. Various potential sources of funds.
2. Other support sources.
3. The marketplace, the direct beneficiaries of services.
4. Government regulatory agencies.
5. Employees or client organizations.
6. Competitors.
7. Other environmental factors (p. 49).

Pearce II and Robinson (1991) liken strategic planning to a rudder that keeps a business on course, while environmental scanning is compared to radar that informs a pilot of the conditions to be encountered ahead. Wilson (1983) developed his radar analogy further by stating: (a) environmental scanning should cover every aspect outside the organization, (b) the scanning should be continuous, and (c) there is something resembling an automatic control in the system in the results obtained. Wilson gave six suggestions for effective environmental analysis:

1. Environmental analysis should be an integral part of strategic planning.
2. Environmental analysis should focus on strategic issues and assist in making strategic decisions with a good sense of futurities.
3. Environmental analysis should cover all aspects of the organization's environment.
4. Environmental analysis should be continuous.
5. Environmental analysis is a search of the unknown. Anything may happen.
6. Environmental analysis is qualitative. A large part of the input is from subjective judgments.

Morrison, Renfro, and Boucher (1984) presented an environmental scanning model with the following steps:

1. Scanning: searching the external environment for opportunity and threat.
2. Evaluation/ranking: analyzing factors observed to measure the degree of impact they have on the institution.
3. Forecasting: predicting the future in light of the emergence of these factors.
4. Monitoring: identifying areas for additional scanning or continued scanning.

Kotler and Andreasen (1991) specified three components of the external environment to be used in environmental analysis: (a) the public environment, consisting of groups and organizations that take an interest in the activities of the focal organization; (b) the competitive environment, consisting of groups and organizations that compete for attention and loyalty from the audiences of the focal organization; and (c) the macroenvironment, consisting of large-scale fundamental forces that shape opportunities and pose threats to the focal organization. The principal forces of the macroenvironment are the demographic, economic, technological, political, and social forces that are uncontrollable.

At its inception, formal strategic planning was conducted from an 'inside-out' perspective (looking only inside the institution). More recently, the approach to strategic planning has been to place the focus on the external environment, or on what is outside the institution that may affect the normal operation of the institution. Specific steps in environmental analysis may include (a) definition of the environment, (b) scanning, evaluating/

ranking, forecasting, monitoring (Morrison, et al., 1984), and (c) providing input (information for decision making) to the strategic planning process. To quote Wilson (1983):

Environmental analysis is intended to help us cope with an uncertain world. It should not be expected to remove the uncertainty; but, by using this tool well, we can reasonably expect to make the inevitable uncertainty more manageable. (pp. 9-19)

Strategy Formulation

According to Kotler and Fox (1985) "an overall strategy for the institution is the culmination of strategic planning" (p. 77). Formulation of organizational strategy is the fourth step in the strategic planning process, after development of the organization's mission statement, goals, and objectives; institutional analysis; and external environment assessment. These three earlier steps represent ongoing tasks which will be performed over and over, and in continuously monitoring these areas, the institution must now pay particular attention to the environment because of its turbulent state.

Most of the literature deals more with actions required to implement strategies than with formulating strategies (Digman, 1990). Pearce II and Robinson (1991), for example, proposed the following as options from which to select in formulating the grand strategy of the institution:

1. concentration on the current business;
2. market and product development;
3. innovation;
4. horizontal and vertical integration;
5. joint venture;
6. concentric and conglomerate diversification;

7. retrenchment/turnaround;
8. divestiture;
9. liquidation;
10. combination grand strategies.

In this study, strategy formulation in institutions of higher education is understood in the manner explained by Kotler and Fox (1985). They defined institutional strategy as including "decisions about its current programs (whether to maintain, build, or drop them), and about future new programs and market opportunities" (p. 77). Once the previous three steps in the strategic planning process have been completed, this step may be begun, with attention to five distinct areas of institutional strategy: "(a) academic portfolio strategy, (b) production/marketing opportunity strategy; (c) competitive strategy; (d) positioning strategy; and (e) target market strategy" (p. 132).

The first task is determining academic portfolio strategy. Educational institutions must evaluate programs in order to scrutinize their relevancy and appropriateness to the market. The academic portfolio strategy is a strategy to evaluate academic programs with respect to centrality of the program to the mission of the institution, the quality of the program, and market viability. As Kotler emphasized, a strategic decision can be made to maintain or build the quality and size of a program, reduce the size of a program, or terminate a program and replace it with a new one decided upon through portfolio strategy analysis.

The second task is determining the product/market opportunity strategy. The institution needs to search for new programs and new markets. Kotler proposed a program/market opportunity matrix as a systematic way for the institution to pursue new programs and markets. Common sense dictates

that this strategy be applied only when the market is not saturated. Again, the opportunities that have been identified must be evaluated for their centrality, quality, market viability, cost, and other features. The best alternatives found can be selected for use.

The third task is determining a competitive strategy. This consists of analyzing the cost of programs and services offered by the institution with respect to the competition for resources. Every institution faces constant competition for resources, including students, faculty, and donors, although traditionally the idea of competition has been regarded as foreign to academic circles. Educational institutions can make use of information gathered from their analysis of their own market assets (program quality, program uniqueness, price, convenience, reputation, students and faculty, among other aspects), as well as from their analysis of the competitors (their financial situations, admissions criteria, enrollment trends, programs offered, and other aspects) to help in designing competitive strategy. To design an effective competitive strategy, the institution has to understand its market, analyze its competition, and think and act strategically to maintain and build on its current strengths.

Fourth, positioning strategy helps determine the current standing of the institution in the minds of those who have contact with the institution or know about it. The task for the institution is to select an appropriate position and then support that position by all possible means. To develop a positioning strategy, Kotler suggested four steps, namely, (a) assessing the institution's current position in the relevant market, (b) selecting the desired position, (c) planning a strategy to achieve the desired position, and (d) implementing the strategy.

Fifth, a target market strategy is designed to select the particular market targets for each program and develop marketing strategies for them. Selection criteria for the marketing strategy may include market segmentation appropriate to the program, analysis of competitive position, and development of an effective marketing mix to reach and serve the chosen consumers (Kotler & Fox, 1985).

Organization and Systems Design

Whittaker (1978) has stated that "one of the basic principles of management, whether in an organization of ten people or a million plus, is 'organizing'" (p. 55). The work of an organization must be divided among its members, and the organization must be structured in such a way that people work effectively to accomplish the goals and objectives of the organization. The main purposes of organization and systems design are to improve the quality of work life and the productivity of the organization (Ackoff, 1981). Good organization and systems design are important to achieving the stated mission of the organization.

Rock and Eisthen (1983) considered organization design an important instrument to be used in achieving the aspirations of an organization's members. The two most important considerations are the organizational structure and decision-making. Appropriate structure helps the members to carry out their assigned responsibilities in such a manner as to produce results which will ultimately fulfill the organization's mission.

Chandler (1962) emphasized two aspects of organization design. First, the lines of authority and communication between the different administrators must be made clear. Second, the information and data that flow through these lines of communication need to be considered. Attention

to both is essential to the maneuvering of all the resources of the organization to achieve its goals and objectives. From his experience with many companies, and especially with DuPont and General Motors, Chandler (1962) developed the idea that "structure follows strategy and . . . the most complex type of structure is the result of the concatenation of several basic strategies" (p. 14). Chandler indicated that the relationship between structure and strategy is such that when there is a change in strategy, then the structure must be adapted accordingly so that the organization's resources will be used efficiently and profitably.

The same relationship between strategy and structure proposed by Chandler was also espoused by Andrews (1971), who wrote that "the chief determinant of organizational structure and the processes by which tasks are assigned and performance motivated, rewarded, and controlled should be the strategy of the firm" (p. 181). Thus in Chandler's view, before coming to the point of implementation of a strategic plan, the organization and its systems should be consciously designed so that maximum benefit will be obtained from the implementation of its strategies.

An organization is always changing in response to its own makeup and past development. Galbraith and Nathanson (1979) presented results from the Harvard Studies, as summarized by Scott, that supported the idea that structure follows strategy in general, and that diversification of strategy leads to multidivisional structure. In referring to contingency theories of organization, Galbraith and Nathanson further stated that "there is no best way of organizing, but . . . all ways of organizing are not equally effective. The choice depends on the situation" (p. 257).

Galbraith and Nathanson (1979) quoted Oliver Williamson in support of the idea that the internal organization and administrative processes should develop an adaptive approach to outside uncertainties.

Lorange (1982) stated that the purpose of organization design was “a decision process to bring about a coherence between the goals or purposes for which the organization exists, the pattern of division of labor and interunit coordination and the people who will do the work” (p. 93). The organization, though an open system, must define its boundaries. Then, the organization design process is the link between the organization’s goals and its operational plans and their implementation. The critical variables of organization design are task, structure, information, decision processes, reward systems, and people. All of these variables must be considered in the creation of an internally consistent organizational form, as well as in attaining the appropriate ‘fit’ or congruence with the firm’s strategy (Lorange, 1982, p. 98). If one of the variables is changed, then all other organizational variables need to be altered to maintain internal fit and also to ensure a fit with the organization’s strategy for adjusting itself in response to its environment. Strategic planning and organization design are thus strongly interrelated.

Schendel and Hofer (1979) and Hofer, Murray, Charan, and Pitts (1984) considered three main categories in organizational design:

1. Structure, which includes physical structure and layout, methods of specialization, departmentalization and coordination, and delegation of authority;
2. Systems and processes, including those dealing with information collection, processing, and dissemination; resource allocation, measurement,

and evaluation; rewards and sanctions; and personnel selection, development, and promotion;

3. Behavior, which includes interpersonal behavior, informal organization, leadership style, and the use of power and influence.

MacMillan and Jones (1987) viewed organization design as having wider scope, including not only design of the organizational structure but also design of the support, planning, and control system. They divided organization design into three categories, namely, (a) grouping decisions (to group or divide major work functions), (b) linking decisions (to unite and integrate work units), and (c) system decisions (to provide necessary support systems).

Peters (1986) made use of different approaches in his explanation of the organization. According to Peters, the emphasis in any organization must be on customer satisfaction. An innovative organization must always focus on the outside world in order to adapt to customers' needs. This enables the organization to make use of its skills to invent adaptive strategies so that it can compete, develop and grow. In sum, Peters' position is that "skills drive strategy" (p. 418).

For the purposes of this study, Kotler and Fox's (1985) conception of structure, people, and culture as key elements in organization design was adopted. Division of work and responsibilities, as well as the modification, merging, and cancellation of work units, is reflected in the structure of the organization. To carry out strategy, people need to be selected so that a fit is achieved between the people and their different positions. To avoid resistance, the institutional culture (shared values, beliefs, and ways of looking at things) must be managed. The institution also has to provide the

systems necessary to support the organization design. The three principal systems are the information, planning, and control systems.

Whether “structure follows strategy” or “the firm’s structure and processes influence its choice of strategies” is immaterial. The important thing is that there should be interaction and coordination among strategy, structure, and environment. The interaction effect may be the most significant factor in explaining the performance of the institution (Digman, 1990).

Implementation and Evaluation

The last component in the strategic planning process is implementation. Broadly speaking, implementation is a process of turning strategic decisions into reality. The purpose of implementation is to ensure that the planned results of strategic decisions are realized; and successful implementation requires that management shape the formal structure of the organization, its informal relationships, and its processes of motivation and control (Digman, 1990).

Digman (1990) identified five key implementation tasks:

1. building an organization capable of carrying out the strategic plan;
2. allocating resources and focusing them on strategic objectives;
3. eliciting an organization-wide commitment to the chosen strategic plan;
4. installing internal administrative support systems;
5. exerting strategic leadership.

Birnbaum (1990) pointed out that there are two sides of implementation. As a science, implementation has to deal with specific steps in a process; as an art, implementation deals with the “softer” side of

management, the human resource issues, employee participation, communication, and commitment. In his analysis of the process of implementation, Birnbaum (1990) described three major subprocesses, namely, preplanning, planning, and postplanning implementation steps.

Hofer, Murray, Charan, and Pitts (1984) mentioned only organization and systems design and strategic control processes in their discussion of the process of implementation.

Sawyer (1986) presented a different approach to implementation. He listed steps to be followed in administering and controlling strategic plans. They are:

1. Establish a plan control framework.
2. Reevaluate the present plan.
3. Keep the plan on schedule.
4. Review the strategy if necessary.
5. Rebuild the plan to make it work.
6. Keep the plan pointed at its intended targets as they move (pp. 8.17-8.18).

Radford (1980) discussed three major aspects of implementation: '(a) the restructuring of the organization; (b) guidance provided to those responsible for carrying out the strategy; and (c) allocation of resources.

Whatever the processes or steps suggested, the objective is the same, that is, to translate strategy into reality and to achieve the goals and objectives of the organization. Most of the authors whose contributions to implementation literature were reviewed provided a step-by-step procedure for translating strategy into activities designed to obtain the desired results.

For the purposes of this study, organization and systems design was given special prominence and treated as a separate component in the last element of strategic planning. The meaning of implementation itself thus came to be limited to actually putting all the plans into operation in

accordance with the structure, systems, and processes laid down earlier. To ensure that plans are implemented successfully, systems for monitoring, evaluation, and control must be included in the total organizational design.

To achieve successful implementation, Digman (1990) proposed strategic control. The purpose of strategic control is to monitor progress and take any corrective action found to be necessary. Strategic control attempts to ensure that performance will conform to plans. Effective control requires (a) the measurement of performance, (b) an evaluation of that performance, (c) an analysis of deviations from the plan found in the performance, and (d) taking appropriate corrective action to modify future performance, plans, or both.

Effective strategic control involves answering two key questions: (a) Has the strategy been implemented as planned? (b) Once implemented, is the strategy producing the desired results? To answer these questions, the author proposed a strategic control process consisting of four basic elements, as follows:

1. First, performance standards need to be developed. This involves evaluating the plan and setting standards for performance in accordance with that evaluation.
2. Second, measurement of actual performance is needed. In this step, data are collected and processed, functional controls are implemented, and environmental signals are monitored. The mechanism operates in a feedback network so that adjustments can be made to environmental changes.
3. Third, a performance evaluation must be done. Here, the actual performance will be compared to standards to determine deviations.

4. Fourth, corrective action and contingency plans are needed. In this final step, if undesirable or negative deviations occur, corrective action must be taken and contingency plans implemented to suit the changing environment.

Performance should be compared not only to the best in the same institution but also to be best in the field. That is, to be able to compete, an organization should "benchmark" performance against that of another institution known to be excellent in the relevant functional area (Digman, 1990, p. 342).

Applied Strategic Planning

Strategic planning has been in use for over four decades. It has evolved and developed, changing in response to failures as well as successes. It is useful to learn something about the experience top executives of various organizations have had with planning. This can help us come to a better understanding of the need for and the consequences of formal planning as it has been carried out by organizations.

Strategic Planning as Applied by Business Organizations

In the past, strategic planning seemed to be in a dilemma. According to Naylor (1983), "forecasts were often unreliable; trend extrapolations could be misleading; turbulence which was unpredictable became the norm of decision-making; decision-making was a matter of opinion and judgment" (pp. 22-6).

Toll (1982) found that strategic planning in corporations had produced mixed results. He cited the findings of Charles Lindblom and Aaron Wildavsky to explain why planning failed more often than it succeeded. Two important problems found were inadequacies of past planning and relying

mainly on quantitative and simplified approaches to the extent of neglecting the changing outside environment and the human factors.

Strategic planning can be applied as a comprehensive program in large organizations, and it can also be applied in specific areas (Rothwell & Sredl, 1992). Barocas (1992) did research with large corporations, such as AT&T, IBM, Xerox, Hewlett-Packard, the Coca-Cola Company, and others that used strategic planning in the area of employee benefits. He reported that more than 50% of responding executives said planning was useful or invaluable. Strategic planning has been used in a variety of areas, including determining employee remuneration (Lawler, 1990), public affairs planning (Bowling, 1986), human resource planning and management (Rothwell & Kazanas, 1988), and others.

Strategic planning has taken place in the periods characterized by growth, stability, retrenchment, and use of a combination strategy (Boseman & Phatak, 1988).

In a study of 20 firms from several different industries in nine cities in the US, Ensign and Adler (1985) reported the following findings of Franklin and others. First, the planning cycle and approval process varied widely among firms, with no strong distinguishing characteristics of large or small firms. Second, a key finding in the area of internal and external environmental factors was that there should be improvement in formal internal scanning practices. And third, there was acknowledgment of a greater need for strategic planning in the face of changes in the environment to ensure the survival of organizations.

From their experience, Pfeiffer, Goodstein, and Nolan (1986) judged that many people did not grasp the concept of strategic planning clearly.

Consequently, strategic planning processes were poorly executed and results were not consistent with expectations. Pfeiffer, et al. (1986), suggested that the strategic planning process should provide the criteria both for making organizational decisions at all levels and for evaluating the decisions made.

In order to understand how strategic planning worked, Gray (1986) and his colleagues conducted a broad survey of business unit heads, corporate planning directors, and chief executive officers engaged in strategic planning in American multibusiness corporations. The following findings were reported:

1. Most companies in the sample remained committed to strategic planning.
2. Over half reported feelings of disappointment and frustration arising from difficulties encountered in the implementation of plans.
3. The implementation problems found were attributed to problems in organizational and systems design and in the way the organization had been managed.

Hunsicker (1986) found that many top managers regarded the strategic planning process as "sophisticated and time-consuming" (p. 451) in use. He characterized this view as a kind of "paralysis of analysis" (p. 454).

Koontz (1976) compared an organization's strategy to the rudder of a ship. According to Koontz, people failed to use strategic planning tools well because there was a general lack of knowledge about what strategies were and why they were important, how to fit strategic planning into the entire planning process, how to develop strategies, and how to implement strategies.

As a practitioner of strategic planning, and after reviewing strategic planning experiences in the federal government and in three Fortune 200 corporations, Michel (1986) observed that there were many unsuccessful examples of use of the strategic planning process by organizations. Michel found several sources of error, including the following:

1. tolerance for major unresolved issues;
2. inaction on emerging major issues;
3. stepping over the boundary of responsibilities;
4. making key decisions outside of the normal process;
5. redesigning the process for each decision;
6. incomplete decision communication;
7. poorly designed strategic mission statements.

A survey questionnaire was administered to a random sample of 650 executives drawn from the Fortune 500, Fortune 500 Service, and Inc. 500 companies to obtain their perceptions of the extent of changes that had occurred over the past five years in formal strategic planning in their organizations (Ramanujam, Camillus, & Venkatraman, 1987). The following five aspects of strategic planning were reported to have increased the most:

1. overall emphasis on strategic planning systems;
2. perceived usefulness of strategic planning;
3. involvement of line managers in strategic planning activities;
4. time spent by the chief executive in strategic planning;
5. acceptance of the output of the strategic planning exercise by top management.

In a series of interviews with corporate planning officers in selected American companies, Royce (1986) identified three main problems in

strategic planning, namely, (a) difficulty in converting information on the environment into usable assumptions, (b) failure to generate a variety of strategic alternatives, and (c) difficulty in implementing plans. At the same time, Royce (1986) also pointed out two main behaviors of top management from the survey done by George Steiner in 1972 that contributed to the failure of strategic planning. The first was that top management spent most of its time in the firm's daily operations and had no time for planning. The second was that top management made use of intuitive decisions rather than the formal strategic planning mechanism.

Goodstein and others (1992) suggested seven ingredients of a successful planning process: The strategic planning process should be future-focused, leadership-driven, conducted with a high level of organizational involvement, widely understood and accepted, comprehensive and detailed, able to be applied rigorously, and sufficiently dynamic to drive the transformation of the organization.

According to Rowe, Mason, and Dickel (1986), strategic management must be interrelated with contextual variables which include the socioeconomic environment, organizational dynamics, the physical and technological environment within the organization, and the decision style of key executives in the corporate hierarchy. This principle of interrelation of strategic management practice with its contextual variables, especially with respect to the aspect of business environment, appears to be confirmed by a case study of the Thai Polyester Fiber plant. Austin and Kohn (1990) studied the case of the Thai Polyester plant, which was founded in 1972 as a joint venture between Chimie du Sud, one of the world's largest chemical conglomerates, and the Yipsoon Group. They were convinced as a result that

adequate analysis of the business environment and clear understanding of the environment's influences on operations of the firm were keys to successful management in less-developed countries.

Usually execution is to blame for the failure of strategic planning as applied by organizations. The most important factor in failures is ineffective strategic thinking (Allio, 1988). Lorange (1982) stated that "there seems to be no one best way to structure the strategic planning process" (p. 99). Lorange cited the earliest research on strategic planning which clearly implied that "there was no single organizational planning pattern that fit all companies" (Lorange, 1982, p. 99). Instead, a contingency-based approach should be used in the design of the formal planning process if it is to be effective (Lorange, 1979).

Mitchell and Marks (1983) mentioned that there was no order of precedence in the application of the components of the strategic planning process. The bottom-up and top-down processes in planning should be mutually supportive.

Schoeffler (1983) reported findings from more than 200 major companies participating in the Profit Impact of Market Strategy (PIMS) program which indicated that strategic planning is developing and has a place in today's organization. The greatest weakness in the strategic planning process lies in the informational and analytical input. The planning process worked well for executives with good intuition and/or good luck.

Thomas, Litschert, and Ramaswamy (1991) pointed out that the effectiveness of outcomes depended largely on the degree of alignment between the characteristics of organizational leaders and their strategies.

The Application of Strategic Planning in Higher Education

During the time when higher education was experiencing growth and expansion, in the 1950s, 1960s, and early 1970s, the field of higher education management was also in a period of growth and development (Cameron, 1983). In the 1980s, changes in the environment became rapid and discontinuous. The literature suggested that the difficulties American institutions of higher education had experienced with planning resulted from incongruities and inconsistencies between the assumptions underlying recommended planning approaches and the operational realities of academic institutions. Many tried to use planning processes derived from corporate and government models with little consideration of conditions that might affect their applicability in an academic setting.

Schmidtlein and Milton (1988-89) suggested that colleges and universities should use planning approaches that reflected their unique organizational characteristics. They cited specific difficulties in applying strategic planning in academic institutions, as follows:

1. The emphasis of strategic planning is on economic opportunities, which are different in the academic world.
2. Strategic planning concepts are not clearly related to higher education settings.
3. In higher education, growth and opportunity are limited because of the need to satisfy internal constituents and because the values of the academic culture generally are inconsistent with strategic planning's emphasis on market demand.

By contrast, Cyert (1981) believed that nonprofit organizations (including higher education institutions) could be managed in the same manner as profit-making organizations.

Young (1981) mentioned that various arguments were presented in opposition to use of a system of strategic planning in higher education institutions. He specifically noted the following:

1. Strategic planning was too mechanical a process, and an institution must rely on the faculty to form any new program.
2. Strategic planning was applicable more to private than public institutions.
3. The objectives of higher education were viewed in a priori, abstract, and permanent terms.

For strategic planning to be successful in an academic setting, Balderston believed top management must tailor an appropriate approach to create a fit with the particular institution. There should also be compatibility between the approach, the environment, and the decision-making style of management (Balderston, 1981).

As one of the promoters of strategic planning, Cope (1981) also agreed that strategic planning can be adapted for use in colleges and universities. His opinion was based on a growing consensus reflected in the literature that, while there are differences, the essential characteristics of strategic planning in business organizations and nonprofit organizations are similar. In spite of the differences and the difficulty of applying strategic planning in higher education, Cope (1981) still confirmed its usefulness:

Used wisely, strategic planning will aid in the formulation of crucial issues, serve as a guide to diverse operating and administrative functions, force a greater awareness of changes

in external, environmental forces, and should help develop a way of thinking that broadly takes into account the institution's mission, its particular capabilities, and its opportunities in the environment. (p. 20)

According to Chaffee (1984), successful strategic management must follow either an adaptive model or an interpretive model. The adaptive model is goal-directed, attuning the institution to changes in market demand and reorienting the institution as needed in order to maintain or increase the flow of resources from the market to the institution. On the basis of the adaptive models, colleges and universities must conduct market research, monitor trends in their environment, increase flexibility, and update their program offerings. On the other hand, the interpretive model makes use of communication and symbols in the management of meaning for the life of institutional participants.

Chaffee (1984) studied two sets of colleges that experienced financial difficulties in the mid-1970s. The more resilient colleges were more likely to have pursued a combination of adaptive and interpretive strategies.

In the application of strategic planning, Hammond (1984) proposed three ways for small private colleges to survive, namely, (a) balancing institutional growth with productivity, (b) encouraging institutional flexibility that would give rise to new behaviors appropriate to new conditions, and (c) emphasizing the adjustment of technical design, political allocation, and ideological or cultural mix to different social contexts.

Hammond (1984) suggested further that colleges should not be isolated from the external environment. Some members of every institution must assume boundary-spanning roles for information gathering and interpretation.

Tack, Rentz, and Russell (1982) discussed the philosophical assumptions underlying the strategic planning process and the operational guidelines that can ensure the effectiveness and efficiency of the process. The assumptions described as underlying a successful strategic planning process included:

1. broad participation of those affected by planning;
2. the opportunity for dissenting opinions to be expressed and considered seriously;
3. involvement of the affected groups in the development of the planning process itself;
4. opportunity for instituting change;
5. commitment of the participants to planning;
6. the inclusion and influence of the planning process in all directions within an organization;
7. awareness of the relationship between size of the planning group and the effectiveness of the planning process and the goals arrived at;
8. the ultimate responsibility for decisions relative to execution of recommendations resting with the administrator of the institution.

To ensure effectiveness and efficiency, Tack, et al. (1982), prescribed six operational guidelines as follows:

1. The planning process should include both short-range and strategic planning mechanisms.
2. The planning process must include implementation strategies.
3. Diagnostic, formative, and summative evaluation are critical to successful planning.
4. Alternatives must be acceptable to participants.

5. Responsibilities for implementation, evaluation, and provision of support services need to be designated.

6. Procedures for obtaining and using empirical evidence are essential to successful planning.

St. John (1987) contended that there must be a gradual evolution of planning methodologies in higher education. The first stage would be focused on facilities and program planning essential to the founding and renewal of institutions. The next stage would involve long-range planning and master planning essential to building the capacity of institutions to deliver educational services. The third stage would emphasize systems approaches which integrated planning and management methodologies for effective management. And finally, the current state of planning would be one which emphasized strategic approaches combining planning and policy analysis techniques to build effective institutional decision-making capabilities.

St. John (1987) further stated that to be successful in applying strategic planning in institutions of higher education, the institutions must pass through the four stages prescribed. Training in the application of strategic methodologies must also be provided, and it should emphasize strategic thinking and the fundamental need for capacity-building on the part of agencies and institutions.

Rather than focusing solely on how strategic planning may be applied in the business world and in institutions of higher education, McGinnis (1987) tried to integrate the two sectors by suggesting that to help develop integrative skills in the business world, the business schools must train future managers to integrate theory and practice.

Among institutions of higher education employing strategic planning were many that had been plagued with threats and dangers but finally were saved. Each institution was in a unique situation with respect to its resources, environment, and problems. Through the strategic planning process, each took measures to stimulate institutional revival. Sometimes, the problems appeared to be similar, but the root causes were different (Steeple, 1986).

Doyle and Lynch (1979) reported little progress in the application of strategic planning in British universities. The following main reasons were cited:

1. Universities have a highly democratic structure, and it is difficult to bring about change. In addition, the goals of a university are rarely defined in an operational manner.
2. In a university, the academics tend to treat all the departments as equally important. No priority is given to any particular program.
3. Universities are not market-oriented, and courses are not established on the basis of supply and demand in the market-place.
4. The system of tenure means resources are highly inflexible. The unwillingness to allocate disproportionate resources to high performing universities also reduces the incentive for a university to direct investment to areas of potential high performance.

Neumann (1993) looked at college planning from two perspectives--rational and cultural. She contended that effective administrators would exhibit both, as administrators need to be able to shift between the two perspectives as necessary.

Summary

From the review of the manner in which strategic planning has been applied in the business world as well as in institutions of higher education, the following observations can be drawn:

1. Strategic planning can be divided into three main areas: assessment, strategy, and execution (Boar, 1993). It has also been divided into intellectual and operational levels (Cope, 1981).

2. The steps taken in the process of strategic planning should not be considered to be separate and successive. As Cohen and Cyert (1973) suggested, "the whole procedure is a dynamic feedback process that has neither a beginning nor an end; it is merely for expository convenience that we label the first step as formulating corporate goals" (pp. 349-350).

3. In the application of strategic planning, there have been successes and failures, and certain problems have been encountered.

4. To apply strategic planning successfully requires coordination and harmonious fit among "the mindsets, the plan, the practices, and the overall controls" (Gray, 1986, p. 448).

5. Most of the unsuccessful attempts to apply strategic planning have occurred as a result of a misfitting of one or many parts of the mechanism of strategic planning.

6. There is no one best approach to the strategic planning process (Lorange & Vancil, 1981; Balderston, 1981; Mangieri, 1993). As Mangieri (1993) observed, "there are different types of planning and none is innately the best. Which proves to be most effective will be determined by the purpose(s) for which it is being used, the group's readiness to engage in the process, the attributes of the leader, and the characteristics of the institution" (p. 49). It is

therefore necessary to design a strategic model that will be suitable for a particular institution.

7. Strategic planning must be applied with attention, commitment, and patience, allowing states of development to occur. Strategies must also be kept simple.

8. The focus of the application of strategic planning should be on building the capacity of the institution more than on immediate material gain (St. John, 1987).

9. Strategic planning is a function and responsibility of all managers at all levels, and of other members of the whole organization as well (Steiner, 1979).

Trends in Strategic Planning

Schaffir (1988) summed up the history of strategic planning as follows:

Strategic planning has gone through many stages. It's been formalized and systematized, criticized, reshaped, misunderstood, oversold (and overbought), once again redefined, misapplied, discarded . . . and revitalized. Today, strategic planning is alive and well in the real world of business. (p. xiii)

The review of the literature has made it clear that strategic planning is increasingly evident in the management of organizations.

Lewis (1987) stated that "the main issue in education during the 21st century is not the question of the need for strategic planning, but rather, how should it be accomplished and how should it be evaluated" (p. 204).

According to Lorange (1982),

. . . the major challenges to planning are likely to stem from rapid environmental changes, discontinuities, crises, and other turbulent conditions. To remain useful, the planning process must show a strengthened ability to help management cope with

developing strategies and implement their strategic decisions in such emerging environments. (p. 225)

In light of major changes in both the environment and internal constraints of institutions, Lorange (1982) proposed corresponding changes in the planning process in four areas:

1. The strategic structure must undergo appropriate change to be fitted to the operational structure.
2. The planning process and all strategic subsystems should also be tailored to various organizations.
3. Environmental scanning should be done continuously to adjust the organization to environmental constraints.
4. Strategic style should also be adapted to changes in internal constraints.

Steiner (1979) believed that formal strategic planning would undergo a process of development and made the following projections:

1. Since there would be a strategic planning model unique to each institution, numerous models of strategic planning systems would be required.
2. There would be more flexibility in the best strategic planning to allow creativity, innovation, and imagination.
3. While the old analytical methods would still be in use, computers and other advanced analytical tools would also be employed.
4. More emphasis would be placed on the formulation and implementation of strategies.
5. Meaningful participation in the planning process by members of the organization would be greatly encouraged.

6. The corporate planner would find a place in the organization and would work side by side with the CEO.
7. Satisfaction with planning systems would grow.
8. More companies, both big and small, would develop some form of formal strategic planning to fit their circumstances.
9. There would be more integration of business strategic planning systems with government planning as a means of dealing jointly with social problems.
10. Finally, there would be a transfer of knowledge and experience from the business world to the nonprofit sector.

Digman (1990) gave practical suggestions for future development:

1. Strategic planning must continue to undergo an evolutionary process. The framework for strategic planning should be improved.
2. Better information should be obtained through the use of better tools.
3. Rewards for strategic performance should replace rewards given on the basis of profit or cash flow.
4. Managers should be trained in strategic management.
5. Not only the top manager but also the rest of the organization should be involved in the learning process.
6. Interorganizational strategies should be used (strategies involving joint ventures).
7. Organizational culture and climate, and the need for harmony between strategic and operational units, should always be taken into consideration in planning.
8. Sustaining networks and cooperation would take the place of the classical hierarchical structure of the organization. (p. 400)

Rowe, Mason, and Dickel (1986) suggested a future direction for strategy formulation and implementation in several areas:

1. Marketing forces must be taken into consideration in the determination of strategy; in particular, a better understanding of market structures and market dynamics is needed.

2. Commitment on the part of the individual should be given priority (to assure performance).

3. Top management should be proactive to achieve significant gains in corporate performance.

4. Strategic management must be able to create the future, while being able to integrate it with operational control.

5. Strategic planning should become open-systems planning in which all levels of management get involved in the formulation and implementation of strategy.

6. The rigid organizational structure of the past should be abandoned in favor of a flexible or ad hoc structure, depending on circumstances.

7. An organizational climate that fosters innovation and entrepreneurship should be encouraged in the interest of commitment and retention of talent.

8. Changes in management and leadership styles are required to encourage not only adaptive but also creative and innovative behavior within the organization, while still maintaining a pragmatic balance. The role of the individual leader in determining the effectiveness of strategy will continue to increase in importance.

9. Resources should be allocated to analyze market conditions, to formulate and implement strategy, and to meet external demands and the requirements of stakeholders. There will be a growing emphasis on changes in the operating environment.

10. New technology, such as decision support systems (DSS), artificial intelligence (AI), and expert systems (ES), may assist in certain decision tasks.

Whenever strategic planning is applied, in the words of Drucker (1974),

It does not substitute facts for judgment, does not substitute science for the manager. It does not even lessen the importance and role of managerial ability, courage, experience, intuition, or even hunch. . . . On the contrary, the systematic organization of the planning job and the supply of knowledge to it strengthen the manager's judgment, leadership, and vision. (p. 129)

Summary

The review of the literature provided in this chapter focused on the historical development of strategic planning. The purpose of this review was to lay a foundation for the understanding of the concept of strategic planning from different perspectives. A working definition was provided as a distillation from previous definitions.

Strategic planning, in the opinion of the researcher, consists of six elements: external environmental analysis; formulation of institutional mission, goals, and objectives; institutional analysis; strategy formulation; organization and systems design; and implementation and evaluation.

Strategic planning has passed through periods of growth, decline, uncertainty, and turbulence. It has been used in the private sector as well as in the public sector. Most of the largest business organizations have used this tool. Institutions of higher education were slow to adopt strategic planning as part of their management, but the literature suggests an increase in the application of strategic planning in higher education as well as the corporate sphere. There are stories of successes as well as failures included in the literature, but strategic planning has been judged more successful than not. Most of the failures were due to misapplication of the tool. Finally, trends in strategic planning were presented. As a managerial tool, strategic planning will be beneficial for years to come.

CHAPTER III

RESEARCH METHODOLOGY

Introduction

The primary purpose of this study focused on the level of strategic planning being applied in selected private institutions of higher education in Bangkok, Thailand. This chapter dealt with the design of the study, the composition and size of the population and sample being employed in the collection of data, the instruments used and how the data would be analyzed to obtain the results.

Design of the Study

The research design included both qualitative and quantitative aspects. In-depth interviews of all presidents of selected institutions were conducted. Collection of data using survey instruments was done with administrators and selected full-time faculty members. The results obtained were analyzed and compared.

Subjects and Sites

Population

The subjects for the study included three major groups. The first group consisted of 10 presidents of the institutions selected. The second group, all the administrators (vice presidents, college deans, and chairpersons) of the selected institutions were included. The full-time faculty members formed

the third group. The population for the survey included 3,357 administrators and full-time faculty members.

Sample

All the presidents of the 10 institutions selected were included in the sample for interviewing since the number was rather small.

The survey was conducted with all vice presidents, college deans, and chairpersons as administrators of the institutions. Moreover, the same survey instruments were administered to full-time faculty members. Since the number of faculty members was large, listings of full-time faculty teaching in the academic year 1994 were requested from a coordinator at each selected institution. Each faculty listing was arranged in alphabetical order. Then, a sample group was obtained by gathering every sixth, fourth, and third person for large, medium, and small institutions in the sample. The total of 765 administrators and faculty members formed the survey sample.

Sites

The focus of this study was with private colleges and universities in Bangkok, Thailand. Ten private institutions of higher education were selected from the total of 15 private institutions of higher education in Bangkok. The other five were not included in this study due to its particular nature of program offering.

Ten selected institutions again were divided into three groups in terms of sizes designated as large, medium, and small. The criteria were based on the student enrollments in each institution. Large institutions were those having more than 12,000 enrollments. Small institutions had less than 4,000 enrollments. The other four institutions were classified as medium-sized

institutions. The reason was to make comparisons in terms of large and small institutions clearer.

Using enrollments, the 10 institutions were divided into three groups (large, medium, and small): three large institutions, designated as L1, L2, and L3, with more than 12,000 enrollments; three small institutions designated as S1, S2, and S3 with enrollments below 4,000; and four medium institutions designated as M1, M2, M3, and M4 between the large and small sizes and with the number of students ranging between 4,000 and 12,000.

Instrumentation

Data for the study were obtained in two ways: (a) through interviews with the president of each selected institution, and (b) through the completion of survey instruments by the administrators and faculty members of institutions under the study.

Interview Instrument

The interview instrument consisted of questions on actual practices on planning using six components of the institutional planning process. The general outline of the interview concentrated on who made decisions on different plans and projects in the institution. The other emphasis was in the studies and the analysis of different outcomes of the plans as well as projects for future planning. The instrument was thus divided into two major parts: In the first part of the instrument, the interviewer requested each president to provide information on who set institutional policies on mission, goals, and objectives; the recruitment of personnel; the personnel development plan; facility hiring; curriculum development (including introduction of new curriculum and termination of the existing one); financial planning; the

design of different systems within the institution, the change or adaptation of the design of systems; and the construction on campus.

The second section of the instrument investigated the following topics for future planning: programs and course offerings demanded by market labor force; public relations for public image and to obtain quality students; the number of students enrolled in each department; teaching and learning methods; evaluation of the teaching performance; academic achievement of students; effectiveness in the working areas of the graduates; the number of graduates working in the field in which they graduated; the reason for being unemployed; manpower planning; financial situation; academic excellence; environmental scanning and institutional analysis.

Survey Instrument

The survey instrument consisted of six components conceptualized by the researcher to be characteristics of the strategic planning process developed from the concepts of strategic planning process of various authors and especially that of Kotler and Murphy (1981) and that of Evans for her doctoral dissertation completed in 1987. Permission was obtained to use an adaptation of her survey instrument in the questionnaire (see Appendix A).

The instrument was comprised of two parts. The first part required the respondents to provide demographic information, their personal background, including the rank rating of the institutions under the survey. For the second part, the respondents provided personal judgments about the six components identified by the researcher as essential elements in strategic planning process. These components were similar to those proposed by Kotler and Murphy (1981). They are as follows:

1. Institutional Analysis. Question 1, Items a-m, measured the respondents' perception of the level of priority of institutional application of strategic planning in terms of the strengths and weaknesses of the institution.

2. Formulation of Institution's Mission, Goals, and Objectives. Question 2, Items a-i, was designed to elicit responses from participants on the role of their institution's mission, goals, and objectives in the strategic planning process.

3. External Environmental Analysis. Question 3, Items a-h, elicited responses from the respondents concerning the level of attention the institution had given to external environmental analysis in the strategic planning process.

4. Strategy Formulation. Question 4, Items a-k, measured the activities organized in the strategic planning process, especially in the arrangement of academic progress.

5. Organization and Systems Design. Question 5, Items a-j, elicited responses on the relationship between strategic planning and the institution's planning structure and planning resources.

6. Implementation and Evaluation. Question 6, Items a-i, measured perceptions of the respondents of the relationship between strategic planning and the actual implementation and evaluation of the plan and strategic control thereof.

A five-point Likert scale was used to measure the relationship between the strategic planning process and the six components at five levels of priority: 1 = none, 2 = some, 3 = moderate, 4 = high, and 5 = highest with value = 1 in case the respondent did not know whether the institution had any planning at all.

A questionnaire was constructed on the basis of established criteria for the strategic planning model. The researcher was well aware of the advantages and disadvantages of the survey questionnaire presented by Orlich (1978).

Instrument Testing

The interview instrument was pilot tested with three vice presidents of Assumption University. Each agreed to help and make suggestions to improve on the clarity, utility and comprehensiveness of the instrument. Their suggestions and revisions were incorporated into the final version of the instrument which was then used as the interview instrument.

Test of validity. The survey instrument consisted of six components conceptualized by the researcher to be characteristics of strategic planning process. The six components were developed from the concepts of strategic planning process of various authors. The model developed in this study was a modified strategic planning process model of Kotler and Murphy (1981) and the questionnaire items were adapted from the doctoral dissertation of Evans in 1987 with her permission (see Appendix A). The content validity for this instrument was further strengthened by two pilot tests conducted with two groups of 15 full-time faculty members of Assumption University in subsequent order to determine the terminology and intent of each statement, to eliminate vague wording, to get suggestions for modifications, and to determine the approximate length of time needed to complete the questionnaire. The opinions and suggestions of the pilot test groups were included for the improvement of the clarity and utility of the instruments. The results of these pilot tests were again revised by three university professors specializing in this area who assisted in its development. Their

revisions were incorporated into the final version of the instrument which was then used for collection of data in this study.

Test of reliability. The survey instrument was tested for its reliability. For this purpose, SPSSX Reliability subprogram was used to determine the consistency in measuring each of the six components in strategic planning process. The results from the computer runs of reliability of each component were as follows:

1. Institutional Analysis	12 items = .74
2. Formulation of Mission, Goals, and Objectives	8 items = .78
3. External Environment Analysis	7 items = .76
4. Strategy Formulation	10 items = .80
5. Organization and Systems Design	9 items = .83
6. Implementation and Evaluation	8 items = .85

Reliability of total score of the six components (54 items) was .90. It was concluded from this test that the survey instrument possessed reliable scales for the measurement (see Appendix E).

Data Collection

Once the interview instrument and survey instrument were determined, then data collection was able to proceed. Permission to collect data with selected institutions was first obtained from the president of the Association of Private Higher Education Institutions of Thailand on June 16, 1994. Then, the president of the Association circulated letters to all presidents of selected institutions informing them of the need of the researcher to collect data. Initial contacts were made through telephone calls to each president making appointments for time and date of the interviews. All interviews were conducted on those specified dates lasting about half-hour each.

On the same occasion as the interview, permission to collect data from the administrators and faculty members was obtained from the president. At the same time, a request was made to the president for a designated coordinator who facilitated the acquisition of the lists of administrators and full-time faculty members, distribution and collection of instruments including the replacement of respondents, and follow-up of the survey.

From the alphabetical listing of full-time faculty members teaching in 1994, a random sample (consisting of every sixth faculty member for large institutions, every fourth for medium and every third for small institutions) was selected for the survey.

Accompanying the survey instrument were a cover letter and a return envelope. The cover letter explained the need for the study and the purpose of the survey; it also assured the subjects that the confidentiality of individual responses would be maintained. The survey instrument was coded for confidentiality and for follow-up with non-respondents. For each respondent, a packet containing the questionnaire, the cover letter, and a return envelope was prepared. A roster list of all administrators and the selected faculty members was prepared and sent along with the survey packets to the designated coordinator at each institution. The prepared packets were hand-delivered to the coordinators for distribution.

The coordinator at each institution distributed the packets to the administrators and selected members of the faculty. If any members of the faculty selected for inclusion in the survey were absent, then the coordinator was requested to select substitutes in the same departments.

Two weeks after the delivery of the survey instruments, the first follow-up with the coordinators was made by telephone. The purpose was to

track the progress made and to check whether any difficulty had arisen. A second follow-up was done in the same manner one week after the first follow-up. After the second follow-up, the first collection of the questionnaires distribute was made. Of the 765 surveys distributed, 412 (53.86%) were received on the first collection. The third and final contact with coordinators was to collect the remaining questionnaires which had been left out. An additional 143 (18.69%) were obtained from this final collection. The total number of survey responses returned was 555, 72.55% of the sample.

Data Analysis

The data obtained from the responses in the six areas of strategic planning were tabulated. The following statistics were used in the analysis of the data.

1. Research Question One. What are the perceptions of administrators concerning the level of priority of institutional application of strategic planning?

To determine the perceptions of administrators, means and standard deviations were computed for groups of items representing each of the six variables identified as components of strategic planning process. Then, t-test (t-values of paired samples) was administered for administrators' perception on actual practice in each dimension of strategic planning to determine the importance and relationship of these components.

2. Research Question Two. What are the perceptions of faculty members concerning the level of priority of institutional application of strategic planning?

Means and standard deviations were first computed for groups of items representing each of the six variables identified as components of the strategic planning process. The relationship and importance of the six variables were

determined by t-tests (t-values of paired samples) of faculty's perception on actual practice in each dimension of strategic planning.

3. Research Question Three. To what extent does the perceived level of priority of institutional application of the strategic planning process vary according to the roles of the respondents?

To compare the perception levels of priority of institutional application in strategic planning of administrators with those of faculty, means for each of the six variables representing components of the strategic planning process were computed separately for administrators and for faculty members. T-tests between administrators' and faculty's perceptions were then performed to compare the administrators' means and faculty's means for each of the six variables representing components of the strategic planning process.

Additional analysis was also done to compare the perception level of suggested application of priority of institutional application of strategic planning of administrators with those of faculty. T-tests between administrators' and faculty's perceptions on suggested applications were performed to compare the means between them for each of the six variables representing components of the strategic planning process.

4. Research Question Four. To what extent does the perceived level of priority of institutional application in the strategic planning process vary according to the sizes of the institutions?

To compare the perceptions of priority of institutional application of strategic planning of administrators and faculty members from large and small institutions, the combined means of administrators and faculty members of large universities and the combined means of administrators and faculty members of small institutions were computed for each of the six variables representing components of the strategic planning process. Then, t-tests on both actual practice and suggested application were performed to

determine whether there was a difference in the levels of priority of application perceived by the two groups.

Analysis of variance on both actual practice and suggested application was conducted for each of the six variables representing components of strategic planning process to determine the relationship between the perception levels of priority of institutional application to the strategic planning process and the sizes of institutions.

5. Research Question Five. What common components of strategic planning are perceived to have a priority ranking in the selected institutions of higher education?
 - a. As perceived by administrators.
 - b. As perceived by faculty members.
 - c. As perceived by both administrators and faculty combined.

To determine the characteristics of strategic planning perceived to be of high priority in the selected institutions of higher education, the following procedure was used:

As perceived by administrators. For administrators, means and standard deviations were computed for perceived desirability (suggested application) of each of the six variables representing components of the strategic planning process. T-tests (t-values of paired samples) were then performed to compare the means of those variables in pair.

As perceived by faculty members. For faculty, means and standard deviations were computed for perceived desirability (suggested application) of each of the six variables presenting components of the strategic planning process. T-tests (t-values of paired samples) were performed to compare these means in pair.

As perceived by both administrators and faculty combined. For both administrators and faculty, combined means and standard deviations were

computed for suggested application of each of the six variables representing components of the strategic planning process. T-test (t-values of paired samples) of administrators' and faculty's combined perception on suggested application for each dimension of strategic planning was determined.

All statistics were computed using the Statistical Package for the Social Science (SPSS/PC+).

Summary

In this chapter, the methodology of the study was described. The discussion included a description of the instrumentation used, a description of the study population, an explanation of how the study sample was chosen, a description of the procedures used for data collection, and the data analysis used related to each of the research questions. In addition to quantitative analysis, the researcher also made a qualitative analysis making use of interviews with each president of the selected institutions. Two collections of data were made. The overall return rate for the study was 72.55%. The sample groups were divided according to roles (administrators and faculty) and sizes (large, medium, and small) of institutions. Only the administrators and faculty of large and small institutions were studied and compared. The medium-sized institutions, a connecting link in between, were considered separately. The six components considered to be the process of strategic planning were: institutional analysis, formulation of mission, goals and objectives; external environment analysis; strategy formulation; organization and systems design; and implementation and evaluation.

The survey instruments were distributed, collected. The data obtained was tabulated and statistically analyzed.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The data obtained from the interviews were analyzed to determine the viewpoints of top management about the priority of institutional application of strategic planning. This chapter profiles the characteristics of the respondents. The major thrust of the chapter is on the results of the interviews and the survey.

Characteristics of Respondents

This study included only private colleges and universities in Bangkok, Thailand. From a list of all 28 private colleges and universities in Thailand (MUA, 1993), another list of 15 institutions in Bangkok was prepared (see Appendix E). Five institutions were excluded from the study due to the particular nature of course offerings. The final list of 10 private colleges and universities comprised the sample for the study.

The 10 institutions were divided into large, medium, and small institutions using the enrollment criterion. Large institutions (L1, L2, and L3) had more than 12,000 enrollment, medium-sized institutions (M1, M2, M3, and M4) had yearly enrollment between 4,000 to 12,000, and small institutions (S1, S2, and S3) had less than 4,000 enrollment.

From the responses obtained, the researcher decided to focus attention on the analysis of data from large and small institutions. The main reason

was that some of the medium-sized institutions had characteristics more similar to large institutions and some had certain characteristics of small institutions. To be able to present a clear picture of the characteristics of large and small institutions in terms of institutional application of strategic planning, the medium-sized institutions were removed and the two extremes were retained. The medium-sized institutions were only included where they helped confirm the results obtained in the analysis of data in large and small institutions. Interviews were then made with the presidents of the 10 selected institutions.

The survey was conducted with the administrators (all vice presidents, deans, and chairpersons) and selected faculty. To randomly select faculty, a listing of full-time faculty teaching in academic year 1994 was obtained from the coordinator of each institution. Every sixth person on the large institutions list, every fourth person from the medium-sized institutions list, and every third person from the small institutions list formed the sample size for the survey. The combined group of administrators and selected faculty totaling 765 formed the sample size. The questionnaires were distributed according to the procedures outlined in Chapter III. The data base consisted of 555 returned questionnaires representing a return rate at 72.55%. The summary of sample size in each institution, number of responses returned, and return rates in percent are given in Table 1. From the table, it can be seen that rate of response was relatively consistent from all selected institutions.

From the total 555 surveys returned, 206 were from large institutions, 219 from medium-sized institutions, and 130 from small institutions. Administrators completed 222 surveys and faculty completed 333. The

distribution of administrators and selected faculty members that provided responses for the surveys is shown in Table 2.

Table 1
Summary of Sample Size and Return Rate

Institution	Sample Size Surveyed	Return	No Return	% of Return
<u>Large Institution</u>				
L1	99	71	28	71.72
L2	97	70	27	72.16
L3	83	65	18	78.31
<u>Medium Institution</u>				
M1	88	58	30	65.91
M2	88	52	36	59.10
M3	74	51	23	68.92
M4	65	58	7	89.23
<u>Small Institution</u>				
S1	63	43	20	68.25
S2	50	42	8	84.00
S3	58	45	13	77.59
Total	765	555	210	72.55

Table 2
The Distribution of Administrators and Faculty by Size of the Institutions

Size of Institution	Administrators	Faculty	Total
Large (L)	88	118	206
Medium (M)	78	141	219
Small (S)	56	74	130
Total	222	333	555

The survey instrument was composed of two parts. Personal background of the respondents formed Part I of the questionnaire and the perceptions of the respondents concerning institutional application of strategic planning formed Part II. Personal background referred to characteristics of the respondents in terms of their role in the institution, gender, age groups, educational background, and the places where they received their formal education. The number and percentage of subjects classified by role, gender, age, educational level, and place of education are shown in Table 3 and 4. The following characteristics were noted:

1. There was relative consistency in the number of administrators and faculty in each institution. There was no consistency in other aspects.
2. The majority of the respondents obtained their education in Thailand and held master's degrees.
3. The three groups differed in the age groups of the respondents.
4. The majority of the respondents' ages for large and small institutions were in the range of 34-59; whereas in medium-sized institutions, the majority were in the age range of 23-33 (see Table 3 and 4).

Table 3

Number and Percentage of Subjects in Large and Small Institutions Classified by Role, Sex, Age, Educational Level, and Place of Education

	Large Institution			Small Institution			
	L1	L2	L3	S1	S2	S3	Total
<u>Role</u>							
faculty	42 59.2%	41 58.6%	35 53.8%	27 60.0%	23 53.5%	24 57.1%	192 57.1%
admin.	29 40.8%	29 41.4%	30 46.2%	18 40.0%	20 46.5%	18 42.9%	144 42.9%
<u>Sex</u>							
male	21 29.6%	22 31.4%	27 41.5%	23 51.1%	7 16.3%	15 35.7%	115 34.2%
female	50 70.4%	48 68.6%	38 58.5%	22 48.9%	36 83.7%	27 64.3%	221 65.8%
<u>Age</u>							
23-33	24 33.8%	24 34.3%	16 24.6%	16 35.6%	10 23.3%	19 45.2%	109 32.4%
34-59	37 52.1%	33 47.1%	33 50.8%	25 55.6%	28 65.1%	15 35.7%	171 50.9%
60-up	10 14.1%	13 18.6%	16 24.6%	4 8.9%	5 11.6%	8 19.0%	56 16.7%
<u>Education</u>							
bachelor's	21 29.6%	8 11.4%	14 21.5%	24 53.3%	5 11.6%	16 38.1%	88 26.2%
master's	44 62.0%	54 77.1%	44 67.7%	20 44.4%	32 74.4%	25 59.5%	219 65.2%
doctor's	6 8.5%	8 11.4%	7 10.8%	1 2.2%	6 14.0%	1 2.4%	29 8.6%
<u>Place</u>							
Thailand	51 71.8%	40 57.1%	41 63.1%	41 91.1%	38 88.4%	34 81.0%	245 72.9%
abroad	20 28.2%	30 42.9%	24 36.9%	4 8.9%	5 11.6%	8 19.0%	91 27.1%
Total	71 21.1%	70 20.8%	65 19.3%	45 13.4%	43 12.8%	42 12.5%	336 100%

Table 4

Number and Percentage of Subjects in Medium-sized Institutions Classified by Role, Sex, Age, Educational Level, and Place of Education

	Medium Institution				
	M1	M2	M3	M4	Total
<u>Roles</u>					
faculty	39 67.2%	35 60.3%	31 60.8%	36 69.2%	141 64.4%
administration	19 32.8%	23 39.7%	20 39.2%	16 30.8%	78 35.6%
<u>Sex</u>					
male	34 58.6%	42 72.4%	5 9.8%	32 61.5%	113 51.6%
female	24 41.4%	16 27.6%	46 90.2%	20 38.5%	106 48.4%
<u>Age</u>					
23-33	30 51.7%	27 46.6%	9 17.6%	24 46.2%	90 41.1%
34-59	18 31.0%	16 27.6%	30 58.8%	22 42.3%	86 39.3%
60-up	10 17.2%	15 25.9%	12 23.5%	6 11.5%	43 19.6%
<u>Education</u>					
bachelor's	31 53.4%	28 48.3%	5 9.8%	24 46.2%	88 40.2%
master's	24 41.4%	26 44.8%	42 82.4%	22 42.3%	114 52.1%
doctor's	3 5.2%	4 6.9%	4 7.8%	6 11.5%	17 7.8%
<u>Place</u>					
Thailand	51 87.9%	50 86.2%	45 88.2%	38 73.1%	184 84.0%
Abroad	7 12.1%	8 13.8%	6 11.8%	14 26.9%	35 16.0%
Total	58 26.5%	58 26.5%	51 23.3%	52 23.7%	219 100%

Analysis of the Interviews

Interviews were conducted with all 10 presidents of the selected private colleges and universities. Appointments were made in advance with each president requesting time and date for an interview. The time and date of the delivery of the questionnaires coincided with the president's interview so that the researcher would have a chance to meet the coordinator personally and to explain the needs and administration of the survey. The main purpose of the interview was to determine the extent to which formal strategic planning had been undertaken by the institution. The level of application of strategic planning was measured by analysis of documents from personnel involved.

Questions were designed using the six components conceptualized by the researcher to represent a strategic planning model. These components had a bearing on the practical and formal aspects of planning and contained the following:

1. Institutional analysis. The researcher inquired about eight items: manpower planning, personnel development, facility acquisition, budgeting planning, study of financial trends, study on teaching and learning methods, evaluation of teaching performance, and the academic achievement of students. These eight items covered four major areas of institutional resources, namely, personnel, physical plant, finance, and teaching-learning .

2. Formulation of mission, goals, and objectives. Questions were asked about the existence of a mission statement, goals, and objectives of the institution, and the alignment of institutional activities with the mission.

3. External environmental analysis. The main components under this variable were the number of applications and enrollments and outside forces such as technological, social, political, economic. The main purpose

was to see the emphasis and interest exerted by the president on external forces that could have a bearing on the operation of the institution.

4. **Strategy Formulation.** To understand the strategies the presidents had used in the institution, the researcher inquired about major areas in which strategies could be implemented. The contents included the existence of curriculum and program development, the process of academic staff and personnel selection, the process to obtain quality students, and the decision making process regarding construction.

5. **Organization and Systems Design.** Concentration was on the who, how, and when of designing the structure and systems of the organization.

6. **Implementation and Evaluation.** To determine the quality of implementation as a part of strategic planning, the following activities were examined: the follow-up on plans and projects, the follow-up of graduates, evaluation of effectiveness, and corrective measures on action-plans.

The researcher also inquired into the manner in which planning was formulated, follow-up, evaluation, the use of the results, and obstacles and difficulties. An effort was made to seek information from the presidents on how they made their strategic decisions and on what basis the decision was made, from hard data to soft data.

For purposes of confidentiality, the identity of each president was excluded from personal background. The analysis was done only to give a general profile of strategic planning application in selected institutions.

The Interview Results

After the 45-60 minute interview with each president, the data gathered were grouped under the six components of strategic planning, and the results are as follows:

Institutional analysis. All the presidents interviewed gave similar testimony about the direction of institutional analysis. Since their institutions were privately owned and self-sufficient, no government subsidies were provided. As a result, the operation of the institutions depended largely on students' tuition fees. The presidents confirmed that financial planning, including budgeting and analysis of revenues and expenses, was regularly and systematically performed. They even mentioned that financial reports were submitted to the Ministry of University Affairs (MUA) on a yearly basis and for a fixed period. Moreover, presentation of financial planning was essential before the institutions received permission from the MUA for tuition increases. All testified that everything went on as planned in this regard.

On the aspect of manpower planning and human resource development, each president confirmed that manpower planning was practiced in his institution. The differences arose in human resource development. The presidents from institutions with sufficient revenues had definite plans on this aspect. For small and medium-sized institutions, the presidents assured that there was some plan for human resource development, but there were no documents to support evidence of planning. The difficulty that presidents of small as well as large institutions were facing was in the turnover of the faculty, more in small than in large institutions. Human resource development planning needed to be adjusted intermittently.

With regard to physical plants, every president stated that there was a long-range plan for any construction on campus. The decision varied depending on the nature of each institution. As a whole, the decision came as the result of a committee, and the feasibility of the construction depended on funding. The way in which decisions were made was similar across

campuses. The final results of the decisions however, varied with the campus. Generally, the decision making was done on the basis of expansion and growth of the organization. Only two presidents mentioned that they used construction to add better profile to their institutions and thus attract more enrollment.

On facility acquisition, the decision-making process was not uniform. It ranged from formal to informal, with decisions made either by committee or by individuals. Yet, all agreed on one point—that they must obtain the facilities required to meet the needs of students, staff and faculty. They further stated that this was also a source of attraction to personnel.

The interviews regarding teaching and learning methods, evaluation of teaching performance, and academic achievement of students revealed that there was evaluation of the teaching performance of faculty in only two institutions. There was no formal study of the teaching and learning methods. All presidents agreed that these issues were important. They even asserted that they would plan more effectively in this area in the future. One commonality was that in all 10 institutions there were academic test measurements for the students, and records were kept systematically. In general, the presidents agreed that the evaluation of teaching performance and the improvement of teaching methodologies was a weak point. The reasons given were the length of time needed to achieve the results, the inaccuracy of the evaluation of teaching performance, and the unaccepting nature of persons who would be evaluated. The presidents reflected about ways and means to improve on this aspect.

As a whole, the presidents confirmed that there was institutional planning involving all institutional resources. The planning with tangible

resources (finance, construction, personnel) was evident in their implementation. What seemed to be more abstract was the study of methods of teaching, the evaluation of teaching performance, and academic achievement and effectiveness . The number of activities, projects, and plans differed depending on funding which, in turn, depended largely on the size of the enrollment.

Formulation of mission, goals, and objectives. The second element of the strategic planning process dealt with the formulation of the institution's mission, goals, and objectives. The formal existence and the person(s) or working units that were the source of their existence was questioned. The results of the interviews revealed that all institutions had their own missions, goals, and objectives put down in writing. Their statements could be confirmed by the fact that the by-laws of the Ministry of University Affairs required that every institution submit its missions, goals, and objectives on the day it submitted documents to the Ministry of University Affairs for approval as a formal educational establishment of higher learning (Ministry of University Affairs, 1992). All pointed out that the missions, goals, and objectives of their institution had evolved through time. These missions, goals, and objectives might have begun with a vision of a founder, and through years of development had been shaped and formed by a group of institutional leaders.

External enviromental analysis. For external environmental analysis, the researcher interviewed the presidents regarding three areas: outside forces (technological, social, economic, political), the market demand of labor, and student demography. The emphases were on the procurement of data and information obtained for decision making, the person(s) or working units

responsible for decision making, and the study of market demand. One of the common features agreed upon by the presidents of all selected institutions was that the external environment played an important role in the planning process. They were forced not only to react to the changes outside the institution, but they sometimes had to forecast and act in advance instead of waiting for the situation to happen (Ansoff, 1984; Keller, 1983; Drucker, 1974). There were no formal studies of the environment as such, but through years of experience and through informal and daily contacts with the news and the existing trends, the presidents were confident of their actions taken in the institutions. They gathered information from the mass media, through educational tours and visits, and through seminars and discussions.

Strategy formulation. Strategy formulation, the fourth element, involved the process of selection and recruitment of teaching staff and other personnel; curriculum development; program increase, or elimination; the method of selection of quality students and other personnel; and investment or expansion in terms of construction. The emphases of the inquiry were on the methods employed in the process, the decision making, the persons or units that were responsible, and how these strategies came into existence. Strategy was at the heart of strategic planning. Every president had strategies depending on the size and circumstances of the institution. In large and long-established institutions, due to better resources and experiences acquired on the job, the strategies employed were varied and broad in scope. In small and newly established institutions, however, the actions taken to formulate the strategies were within the scope of the resources available. Large institutions put up new buildings to increase facilities, to augment qualities, and to attract more students. The process of faculty recruitment was easier due to better

compensation and facilities than in small institutions. What seemed to be common in terms of strategy formulation for both large and small institutions were different forms of public relations and the development of different courses, to keep them up-to-date, to delete what was outdated, and to increase what the market demanded. Another common feature practiced in both categories of institutions was that the formulation of strategies was not based on formal collection of data or research. All decisions depended primarily on past experience and existing information and was subjective to the persons who made the decisions. For big and well-established institutions, most strategies resulted from committee decisions. For small and newly established institutions, strategies tended to be formulated by the highest authority or leader. Nothing was mentioned about strategies particular to small institutions that were distinctive and distinguished them from large institutions.

Organization and systems design. The researcher inquired about the persons or units responsible for organization and systems design, the factors employed in their creation, and the time and factors used in the changes of these mechanisms. Every president agreed that organization and systems were essential to the daily operation of the institution. All stated clearly and emphatically that in their institutions the structures and all sub-systems had been organized and designed by teams of administrators. Only on rare occasions had they been formed or initiated by the presidents. In structuring the systems of the institutions, the presidents considered the "fit" between the environments and the resources of the institutions as the most important aspect (Peterson, 1980; Kotler & Murphy, 1981; Cope, 1987). And once the structures and systems were in operation, they were revised and adapted in

accordance with the changes in environments and all the resources in the institutions. The period of time during which this occurred could not be specifically spelled out. It all depended on the changes that occurred. The difference between the large and small institutions was in the initiation of the organization and systems design. For small institutions, normally, the work was initiated by the president.

Implementation and evaluation. The last component was implementation, evaluation, and adaptation of strategies and organization and systems design. The contents of the interview were on follow-up, evaluation of plans, corrective measures, and end results. Concerning the end results, the researcher inquired about effectiveness of graduates and the manner in which the effectiveness was evaluated; the study of the employment, unemployment, and underemployment of these graduates and their causes; and the study of the methods to reach academic excellence obtained by other institutions. The emphasis was attaining the results of these studies and applying them to future planning. All presidents followed-up on the plans implemented and their evaluation. Corrective measures were specified for future planning. The results also revealed that the processes of implementation and evaluation were done by committees responsible. Further investigation with all presidents on end results (the graduates) revealed that products (effectiveness of the graduates) must be reviewed and studied regarding their relevancy and appropriateness to the market. They needed to study and apply the academic excellence attained by the best institutions in different areas to their own systems (Digman, 1990). Only a few large institutions made use of the research done by business firms and by the Ministry of University Affairs to check on the relevancy and

effectiveness of their products. Most did not do much in this area. In general, each institution made studies on the effectiveness of its graduates and evaluated the effectiveness of the graduates through informal contacts with the alumni. Studies on academic excellence obtained by other institutions were also done informally to view the general pattern for improvement.

Summary

The interviews with the 10 presidents revealed that all six elements of strategic planning were employed in the institutions but with different emphases. Formulation of mission, goals, and objectives was done by all institutions. Its necessity was taken for granted. The presidents' priority seemed to be in institutional analysis and organization and systems design which were day-to-day operations. These two aspects were also points of emphasis in the past. Strategy formulation resulted from the analysis of the first three elements. It can be concluded that all the presidents paid much attention to this element. The process of strategy formulation was abstract and complicated. The analysis of external environments was considered essential and given high priority by all the presidents. The weak point, as found from the interviews, arose from the last element, implementation and evaluation. In particular, weaknesses included teaching method improvement, evaluation of teaching performance, and effectiveness of the graduates. Planning was evident in institutional finance, physical facilities and construction, and organization and systems design. In other areas, planning existed as policies rather than for implementation.

Based on interviews with the presidents of the 10 colleges and universities, it was clear that, to varying extents on the various campuses, both

administrators and faculty were involved in strategic planning. Also, it appeared that strategic planning followed a process related to the six components which were identified in the literature.

Analysis of the Survey

The data obtained from the survey were statistically analyzed. The survey included 54 items which pertained to the six components of strategic planning. Each respondent was asked to give his/her perception of the "Actual Practice" and "Suggested Application" concerning institutional application of strategic planning using a 5-point scale. The 5-point scale represented the five levels of application which were utilized in the survey and also in the subsequent analyses of the survey: Level 1 (none) designated either there was no institutional application of strategic planning as perceived by the respondent or the respondent had no knowledge of its application. Level 2 (some) meant that there was some institutional application of strategic planning. Level 3 (moderate) designated a moderate level of institutional application of strategic planning. Level 4 (high) designated high institutional application of strategic planning, and Level 5 (highest) meant that the institution had very high application of strategic planning. The following is the presentation of the findings of the survey.

Findings of Research Question One

Research Question One: What are the perceptions of administrators concerning the level of institutional application of strategic planning?

Administrators' perceptions about application in actual practice for each dimension of strategic planning and t-test results are shown in Table 5.

In this analysis, a group of 88 administrators in large institutions formed the first unit of analysis and a group of 56 administrators in small institutions formed the second unit of analysis. The perceptions of the administrators concerning actual practice for each component of strategic planning provided data for the analysis.

Table 5 shows the means, t-values in the form of a matrix, and ranking of the levels of priority of institutional application of strategic planning of the six components in actual practice as perceived by administrators in large and small institutions. The rankings of the six components in both large and small institutions were arranged as a result of paired t-tests.

The perception levels of priority of institutional application of strategic planning of the six components in actual practice of administrators in large institutions were considered first. The mean values of the administrators' perceptions of the six components were as follows: Institutional Analysis = 3.82, Formulation of Mission = 3.61, External Analysis = 3.64, Strategy Formulation = 3.32, Organization and Systems Design = 3.68, and Implementation and Evaluation = 3.45. The means ranged from 3.82 to 3.32. The component that received the highest mean was Institutional Analysis with a mean value of 3.82 and the component that received the lowest mean of 3.32 was "Strategy Formulation." In general, the level of perceptions of administrators in institutional application of strategic planning was above moderate to high.

Table 5

T-Test Results (T-values of Paired Samples) of Administrators' Perceptions on Actual Practice for Each Dimension of Strategic Planning

Large Institutions (n = 88)

			Mean	SD	Rank
Institutional Analysis			3.82	0.45	1
Formulation of Mission			3.61	0.74	2
External Analysis			3.64	0.59	2
Strategy Formulation			3.32	0.60	6
Organization and Systems Design			3.68	0.75	2
Implementation and Evaluation			3.45	0.79	5
	Form	Ext.	Strat.	Org.	Imp.
Ins.	3.13**	3.04**	7.72**	2.02*	4.63**
Form.		0.41	4.80**	1.05	2.34*
Ext.			5.46**	0.56	2.30*
Strat.				6.03**	2.30*
Org.					3.92**

Small Institutions (n = 56)

			Mean	SD	Rank
Institutional Analysis			3.34	0.51	1
Formulation of Mission			3.06	0.63	2
External Analysis			3.03	0.64	2
Strategy Formulation			2.41	0.57	6
Organization and Systems Design			2.89	0.68	2
Implementation and Evaluation			2.63	0.82	5
	Form	Ext.	Strat.	Org.	Imp.
Ins.	3.60**	3.81**	12.18**	5.26**	7.05**
Form.		0.30	8.88**	2.13*	4.56**
Ext.			6.80**	1.64	3.57**
Strat.				7.10**	2.76**
Org.					3.29**

* $p < .05$

** $p < .01$

The application of the six components in strategic planning can be ranked (from highest to lowest) according to the magnitude of mean values: Institutional Analysis (3.82), Organization and Systems Design (3.68), External Analysis (3.64), Formulation of Mission (3.61), Implementation and Evaluation (3.45), and Strategy Formulation (3.32).

Paired t-tests were employed to specify the significance of each pair in terms of their interaction with statistical significance set at .05 and .01 probability levels. The results of t-tests utilized a ranking from highest = 1 to lowest = 6 according to importance of the component. The results of the t-tests were presented in the form of a matrix.

In terms of ranking using the results of paired t-tests, Institutional Analysis was ranked first, followed by Formulation of Mission, External Analysis, and Organization and Systems Design having second rank, with Implementation and Evaluation taking the fifth and Strategy Formulation coming last.

Considering the levels of perceptions of administrators in small institutions, the mean values of institutional application of strategic planning of the six components in actual practice were: Institutional Analysis = 3.34, Formulation of Mission = 3.06, External Analysis = 3.03, Strategy Formulation = 2.41, Organization and Systems Design = 2.89, Implementation and Evaluation = 2.63. The administrators' perception levels of priority of institutional application of strategic planning ranged from the highest of 3.34 to the lowest of 2.41. The highest mean of 3.34 in this group was found in Institutional Analysis and the lowest mean of 2.41 went to Strategy Formulation. As a whole, the level of application in strategic planning as perceived by administrators in small institutions was moderate.

Using the magnitude of mean values, the ranking of the six components in strategic planning application from highest to lowest is as follows: Institutional Analysis, Formulation of Mission, External Analysis, Organization and Systems Design, Implementation and Evaluation, and Strategy Formulation.

In terms of ranking, the first among the six components was Institutional Analysis. Three components occupied the second rank, namely, Formulation of Mission, External Analysis, and Organization and Systems Design. Implementation and Evaluation and Strategy Formulation came fifth and sixth, respectively. The first priority of institutional application was on Institutional Analysis and the lowest of all six components was on Strategy Formulation.

It can be seen from the above results that the level of institutional application in strategic planning as perceived by administrators in large institutions was higher than the level of institutional application in strategic planning as perceived by administrators in small institutions. The ranking of the six components, in order of priority of institutional application of strategic planning obtained in large institutions, was the same as the ranking obtained in small institutions. The component which received the highest scores for application, according to administrators in both large and small institutions was Institutional Analysis, followed by Organization and Systems Design, External Analysis, Formulation of Mission, to the lowest scores for application—Implementation and Evaluation, and Strategy Formulation—respectively.

Findings of Research Question Two

Research Question Two: What are the perceptions of faculty members concerning the level of priority of institutional application of strategic planning?

Faculty's perception. The faculty's perception about application in actual practice for each component of strategic planning and t-test results are shown in Table 6. In the analysis, a group of 118 faculty in large institutions formed the first unit of analysis and a group of 74 faculty in small institutions formed the second unit of analysis. The perceptions of faculty in large institutions and small institutions in actual practice for each component of strategic planning provided data for the analysis.

Table 6 shows means, t-values in matrix form, and rankings of the levels of priority of institutional application of strategic planning of the six components in actual practice as perceived by faculty in large and small institutions. The rankings of the six components in both large and small institutions were arranged as the result of paired t-tests.

The levels of perception of institutional application of strategic planning of the six components in actual practice of faculty in large institutions were considered first. The mean values of the faculty's perceptions of the six components were as follows: Institutional Analysis = 3.71, Formulation of Mission = 3.44, External Analysis = 3.67, Strategy Formulation = 3.20, Organization and Systems Design = 3.34, Implementation and Evaluation = 3.27. The mean values ranged from 3.71 to 3.20. The component that received the highest mean was Institutional Analysis with a mean value of 3.71 and the component that received the lowest mean was "Strategy Formulation" with a mean value of 3.20. As a whole, the level of perceptions of administrators in institutional application of strategic planning was above moderate.

Table 6

T-Test Results (T-values of Paired Samples) of Faculty's Perceptions on Actual Practice for Each Dimension of Strategic Planning

Large Institutions (n = 118)					
			Mean	SD	Rank
Institutional Analysis			3.71	0.52	1
Formulation of Mission			3.44	0.65	2
External Analysis			3.67	0.61	1
Strategy Formulation			3.20	0.56	5
Organization and Systems Design			3.34	0.62	4
Implementation and Evaluation			3.27	0.72	5
	Form	Ext.	Strat.	Org.	Imp.
Ins.	4.62**	0.67	8.91**	6.63**	6.25**
Form.		3.76**	4.46**	1.77	2.81**
Ext.			7.97**	5.60**	5.92**
Strat.				2.72**	1.39
Org.					1.12
Small Institutions (n = 74)					
			Mean	SD	Rank
Institutional Analysis			3.07	0.45	1
Formulation of Mission			2.68	0.67	3
External Analysis			2.85	0.65	2
Strategy Formulation			2.24	0.51	6
Organization and Systems Design			2.58	0.62	4
Implementation and Evaluation			2.40	0.73	5
	Form	Ext.	Strat.	Org.	Imp.
Ins.	6.03**	3.47**	15.33**	7.89**	9.27**
Form.		2.10*	6.30**	1.55	3.20**
Ext.			10.82**	3.92**	6.21**
Strat.				6.29**	2.41*
Org.					3.05**

* $p < .05$

** $p < .01$

From the mean values obtained, the six components in strategic planning application can be arranged from highest to lowest as follows: Institutional Analysis (3.71), External Analysis (3.67), Formulation of Mission (3.44), Organization and Systems Design (3.34), Implementation and Evaluation (3.27), and Strategy Formulation (3.20).

The paired t-tests were utilized to specify the significance of each pair in terms of their interaction with statistical significance set at .05 and .01 probability levels. The results of t-tests were presented in the form of a matrix. Using the results of paired t-tests, the six components in strategic planning application were arranged from highest = 1 to lowest = 6 according to importance of application as follows: Institutional Analysis (3.71) and External Analysis (3.67) were ranked first; Formulation of Mission (3.44) came second; Organization and Systems Design (3.34) came fourth; and Strategy Formulation (3.20) and Implementation and Evaluation (3.27) were ranked fifth.

The levels of perceptions of faculty in small institutions can be observed from the mean values, results of paired t-tests, and rankings as shown also in Table 6. The mean values of institutional application of strategic planning of the six components in actual practice as perceived by the faculty in small institutions and arranged from the highest to the lowest mean were: Institutional Analysis = 3.07, External Analysis = 2.85, Formulation of Mission = 2.68, Organization and Systems Design = 2.58, Implementation and Evaluation = 2.40, and Strategy Formulation = 2.24.

From the results of paired t-tests, ranking of levels of institutional application of strategic planning obtained was the same ranking as arranged using the magnitude of mean values in order of precedents as follows:

Institutional Analysis, External Analysis, Formulation of Mission, Organization and Systems Design, Implementation and Evaluation, and Strategy Formulation.

The above descriptive statistics indicate that both sample groups held the six components of strategic planning with almost equal importance with the difference in level of priority of institutional application of strategic planning. Those in large institutions tended to view their institutions as having a higher level of institutional application in strategic planning than those in small institutions. The level of institutional application of strategic planning perceived by faculty in large institutions was higher than the level of institutional application of strategic planning perceived by faculty in small institutions. The rankings of the two sample groups were almost the same.

Combined group perception. Table 7 shows the results of administrators' and faculty's perceptions about application of actual practice for each component of strategic planning and paired t-tests.

Comparison was made between level of institutional application as perceived by administrators and faculty combined in large institutions as one sample group and level of institutional application as perceived by administrators and faculty combined in small institutions as another sample group. T-tests (t-values of paired samples) of administrators' and faculty's perceptions on actual practice were conducted with two sample groups in large and small institutions on six dimensions. The results of means, standard deviations, and paired t-tests are shown in Table 7.

The first combined group was comprised of 88 administrators and 118 faculty in large institutions with a sample size of 206. Means, t-values, and rankings using t-test results are shown in Table 7.

Table 7

T-Test Results (T-values of Paired Samples) of Administrators' and Faculty's Perceptions on Actual Practice for Each Dimension of Strategic Planning

Large Institutions (n = 206)					
			Mean	SD	Rank
Institutional Analysis			3.76	0.49	1
Formulation of Mission			3.51	0.69	3
External Analysis			3.66	0.60	2
Strategy Formulation			3.25	0.58	6
Organization and Systems Design			3.49	0.70	3
Implementation and Evaluation			3.35	0.75	5
	Form	Ext.	Strat.	Org.	Imp.
Ins.	5.54**	2.44**	11.82**	6.11**	7.77**
Form.		3.12**	6.50**	0.62	3.67**
Ext.			9.60**	3.53**	5.89**
Strat.				5.85**	2.49*
Org.					3.18**
Small Institutions (n = 130)					
			Mean	SD	Rank
Institutional Analysis			3.19	0.49	1
Formulation of Mission			2.84	0.68	2
External Analysis			2.93	0.65	2
Strategy Formulation			2.31	0.54	6
Organization and Systems Design			2.71	0.66	4
Implementation and Evaluation			2.50	0.78	5
	Form	Ext.	Strat.	Org.	Imp.
Ins.	6.87**	5.15**	19.35**	9.28**	11.54**
Form.		1.47	10.32**	2.58**	5.34**
Ext.			12.17**	3.96**	6.79**
Strat.				9.39**	3.65**
Org.					4.49**

* $p < .05$
** $p < .01$

The mean values of administrators' and faculty's perceptions of levels of institutional application of strategic planning of the six components as arranged from the highest to the lowest mean were Institutional Analysis = 3.76, External Analysis = 3.66, Formulation of Mission = 3.51, Organization and Systems Design = 3.49, Implementation and Evaluation = 3.35, and Strategy Formulation = 3.25.

The results of paired t-tests, ranked in terms of institutional application of strategic planning as obtained by the six components from the highest = 1 to lowest = 6, were: first, Institutional Analysis (3.76); second, External Analysis (3.66); third, Formulation of Mission (3.51) and Organization and Systems Design (3.49); fifth, Implementation and Evaluation (3.35); and sixth, Strategy Formulation (3.25).

Consider the perceptions of administrators and faculty in small institutions combined. The combined group in small institutions was composed of 54 administrators and 74 faculty to form a sample size of 130.

As shown in Table 7, the mean values of institutional application of strategic planning of six components from the highest to the lowest were: Institutional Analysis = 3.19, External Analysis = 2.93, Formulation of Mission = 2.84, Organization and Systems Design = 2.71, Implementation and Evaluation = 2.50, and Strategy Formulation = 2.31.

A ranking of means of levels of institutional application in strategic planning of the six components from the highest = 1 to the lowest = 6 was: first, Institutional Analysis (3.19); second, Formulation of Mission (2.84) and External Analysis (2.93); fourth, Organization and Systems Design (2.71); fifth, Implementation and Evaluation (2.50); and sixth, Strategy Formulation (2.31).

It can be observed at this point that in actual practice, the level of institutional application of strategic planning as perceived by administrators was similar to the level of institutional application of strategic planning as perceived by faculty. With additional analyses of combined groups between administrators and faculty, the level of institutional application of strategic planning as perceived by the combined group in large institutions was the same as perceived by administrators or faculty separately. And the level of institutional application of strategic planning as perceived by the combined group in small institutions was the same as perceived by administrators or faculty separately. There was only one difference: the level of institutional application of strategic planning in large institutions was higher in the perception of respondents from large institutions than in the perception of respondents from small institutions. Therefore, those in large institutions viewed their institutions as having a higher level of institutional application of strategic planning than those in small institutions.

Findings of Research Question Three

Research Question Three: To what extent does the perceived level of priority of institutional application of the strategic planning process vary according to the roles of the respondents?

Perception in actual practice. To answer this question, results of t-tests between administrators' and faculty's perception on actual practice were used as shown in Table 8.

The level of institutional application of strategic planning was measured against the two roles of the respondents, namely, the administrators and the faculty. The level of institutional application of strategic planning on actual practice was measured in both large and small institutions.

Table 8

T-Test Results between Administrators' and Faculty's Perceptions on Actual Practice of Strategic Planning

	Large Institutions (n _a = 88, n _f = 118)			Small Institutions (n _a = 56, n _f = 74)		
	Mean	SD	T-value	Mean	SD	T-value
Institutional Analysis						
Administrator	45.90	5.43	1.66	40.14	6.12	3.24**
Faculty	44.52	6.23		36.88	5.35	
Formulation of Mission, Goals, and Objectives						
Administrator	28.87	5.89	1.72	24.46	5.05	3.24**
Faculty	27.54	5.20		21.47	5.34	
External Analysis						
Administrator	25.46	4.12	0.41	21.23	4.52	1.55
Faculty	25.71	4.30		19.99	4.56	
Strategy Formulation						
Administrator	33.24	5.98	1.56	24.11	5.75	1.78
Faculty	31.97	5.59		22.40	5.10	
Organization and Systems Design						
Administrator	33.12	6.80	3.51**	25.98	6.09	2.68**
Faculty	30.08	5.60		23.22	5.62	
Implementation and Evaluation						
Administrator	27.60	6.20	1.66	21.07	6.56	1.71
Faculty	26.19	5.79		19.20	5.88	

*p < .05

**p < .01

n_a = sample size of administrators

n_f = sample size of faculty

In large institutions, the sample size of administrators was 88 and the sample size of faculty was 118. In each component, the level of application as perceived by the two roles of administrators and faculty were compared. The mean values of application perceived by administrators and faculty were similar, although the means of administrators were higher except for External Analysis. T-values of the differences of mean values of levels of institutional application of strategic planning obtained in the six components were as follows: t-value of 1.66 in Institutional Analysis, 1.72 in Formulation of Mission, 0.41 in External Analysis, 1.56 in Strategy Formulation, 3.51 in Organization and Systems Design, and 1.66 in Implementation and Evaluation. The results of t-tests of independent groups showed that there was no significant difference in the perception levels of institutional application of strategic planning as perceived by administrators and faculty. The only statistical difference could be found in Organization and Systems Design with a t-value of 3.51; the difference was found to be significant at .01 level.

To measure the difference in level of institutional application of strategic planning in relation to roles in small institutions, t-tests of independent groups were utilized with 56 administrators and 74 faculty. T-values from the comparison of means in the six components were as follows: t-value of 3.24 in both Institutional Analysis and Formulation of Mission, t-value of 1.55 in External Analysis, t-value of 1.78 in Strategy Formulation, t-value of 2.68 in Organization and Systems Design, and t-value of 1.71 in Implementation and Evaluation. From the results of t-tests of independent groups, three variables were found to have significant differences in means between the administrators and faculty at the .01 level. The three variables were Institutional Analysis with t-value of 3.24, Formulation of Mission,

Goals, and Objectives (3.24); and Organization and Systems Design (2.68). On the other hand, External Analysis with a t-value of 1.55, Strategy Formulation (1.78), and Implementation and Evaluation (1.71) were three variables that were not statistically significant, but, again, the administrators' mean scores were consistently higher than faculty mean scores.

It can be concluded from the data analysis that the role differences (administrators and faculty) made no difference in perception of level of application of strategic planning.

Perception on suggested application. T-tests between administrators' and faculty's perception on Suggested Application of strategic planning were used to determine the difference in levels of institutional application of strategic planning in relation to roles.

In large institutions, the two groups of comparison were the administrators of size 88 and the faculty of size 118. Means, standard deviations, and t-values are shown in Table 9. Comparing the mean values of administrators and faculty under each component, the difference was not large. To further investigate the differences, t-values were considered. T-values as the result of comparison of means of institutional application of strategic planning of the two roles in the six components were as follows: t-value = 0.26 in Institutional Analysis, t-value = 1.04 in Formulation of Mission, t-value = 0.18 in External Analysis, t-value = 1.68 in Strategy Formulation, t-value = 1.78 in Organization and Systems Design, and t-value = 2.12 in Implementation and Evaluation. It was found that five components had no significant difference. One significant difference was found in Implementation and Evaluation with a t-value of 2.12 and a significant difference at .05 level.

Table 9

T-Test Results between Administrators' and Faculty's Perceptions on Suggested Application of Strategic Planning

	Large Institutions ($n_a = 88$, $n_f = 118$)			Small Institutions ($n_a = 56$, $n_f = 74$)		
	Mean	SD	T-value	Mean	SD	T-value
Institutional Analysis						
Administrator	52.17	5.30	0.26	48.87	6.21	0.92
Faculty	51.98	4.86		47.93	5.42	
Formulation of Mission, Goals, and Objectives						
Administrator	34.71	3.92	1.04	33.41	4.41	2.08*
Faculty	34.11	4.31		31.72	4.73	
External Analysis						
Administrator	29.75	4.15	0.18	27.91	3.62	1.78
Faculty	29.85	3.56		26.66	4.19	
Strategy Formulation						
Administrator	40.35	4.58	1.68	36.46	5.52	1.67
Faculty	39.16	5.35		34.84	5.49	
Organization and Systems Design						
Administrator	39.68	4.14	1.78	37.64	5.16	1.58
Faculty	38.57	4.65		36.24	4.88	
Implementation and Evaluation						
Administrator	35.50	4.11	2.12*	32.28	5.25	1.30
Faculty	34.19	4.60		31.01	5.73	

* $p < .05$ ** $p < .01$ n_a = sample size of administrators n_f = sample size of faculty

The two groups of comparison in small institutions were a group of 56 administrators and a group of 64 faculty. Table 9 also shows means, standard deviations, and t-values. The mean value of the administrators was almost of the same magnitude as the mean value of the faculty in each of the six components. The t-values of mean differences between mean level of institutional application of strategic planning as perceived by administrators and mean level of institutional application of strategic planning as perceived by faculty in the six components were found to be 0.92 for Institutional Analysis, 2.08 for Formulation of Mission, 1.78 for External Analysis, 1.67 for Strategy Formulation, 1.58 for Organization and Systems Design, and 1.30 for Implementation and Evaluation. T-values revealed that there was significant difference at the .05 level only in Formulation of Mission, Goals, and Objectives with t-value of 2.08 for all the six components.

A simple conclusion can be drawn concerning the difference in level of institutional application of strategic planning in relation to roles. In "Suggested Application," there was no significant difference perceived by administrators or faculty. The perception of either "Actual Practice" or "Suggested Application" did not make any difference (see Tables 8 and 9).

The perceived "Actual Practice" of institutional application of the strategic planning process as found in the respondents of two different work positions is shown in Table 8. The two positions were those of administrators and faculty. The means of the respondents in the two positions in both large and small institutions were nearly the same. In general, when t-tests were used to analyze the data, no significant difference was found in either the administrator group nor the faculty group in terms of perception of

institutional application in almost all the dimensions of the strategic planning process.

In large institutions, a significant difference between administrators and faculty members was found in only one dimension, Organization and Systems Design. In small institutions, however, significant differences were found in several dimensions, namely, Institutional Analysis; Formulation of Mission, Goals, and Objectives; and Organization and Systems Design.

Similar t-tests were applied to the perceived levels of institutional application of "Suggested Application" in the strategic planning process in relation to the positions of the respondents. Only slight differences in perceptions were found, one in large institutions on "Implementation and Evaluation" and another in small institutions on "Formulation of Mission." In general, there was no difference in perception on "Suggested Application" of strategic planning between administrators and faculty (see Table 9).

Findings of Research Question Four

Research Question Four: To what extent does the perceived level of priority of institutional application in the strategic planning process vary according to the sizes of the institutions?

Levels of application by large and small institutions. This research question can best be answered using the results of t-tests of independent groups between large and small institutions on strategic planning as shown in Table 10.

The first group for analysis was the respondents in large institutions—88 administrators and 118 faculty for a total group size of 206. The second group was the respondents in small institutions—56 administrators and 74 faculty for a total group of size 130.

Table 10

T-Test Results between Large and Small Institutions on Strategic Planning

		Actual Practice			Suggested Application		
	n	Mean	SD	T-value	Mean	SD	T-value
Institutional Analysis							
Large Institutions	206	45.11	5.93	10.29**	49.99	5.70	2.23*
Small Institutions	130	38.28	5.90		51.08	5.59	
Formulation of Mission, Goals, and Objectives							
Large Institutions	206	28.11	5.53	8.71**	32.84	4.53	3.84**
Small Institutions	130	22.76	5.41		34.30	4.15	
External Analysis							
Large Institutions	206	25.62	4.21	10.46**	28.63	4.02	1.44*
Small Institutiocs	130	20.52	4.56		29.12	3.84	
Strategy Formulation							
Large Institutions	206	32.51	5.78	14.82**	37.18	5.58	3.67**
Small Institutions	130	23.14	5.43		38.91	5.22	
Organization and Systems Design							
Large Institutions	206	31.38	6.31	10.08**	37.40	5.01	4.00**
Small Institutions	130	24.41	5.97		39.09	4.67	
Implementation and Evaluation							
Large Institutions	206	26.80	6.04	9.91**	32.86	5.04	3.25**
Small Institutions	130	20.01	6.23		34.26	4.86	

*p < .05

**p < .01

Administrators and faculty were combined in both large and small institutions because a conclusion of the findings in research question three revealed that there was no significant difference in the level of institutional application of strategic planning in relation to roles (administrators and faculty).

Table 10 shows the results of means, standard deviations, and t-values of large and small institutions concerning "Actual Practice" and "Suggested Application." Consider the mean values of institutional application of strategic planning in large and small institutions concerning "Actual Practice" and "Suggested Application." The differences between the two means of perception levels of institutional application of strategic planning as perceived by respondents in large institutions and small institutions were considerably large in the six components of strategic planning.

Further investigation was done in t-values concerning both "Actual Practice" and "Suggested Application." Concerning "Actual Practice," there were significant differences ($\alpha < .000$) in the perception levels of the two groups in all six components. The highest t-value belonged to "Strategy Formulation" (14.82) and the lowest was "Formulation of Mission, Goals, and Objectives" (8.71). Concerning "Suggested Application," components that were found to be statistically different at .01 level were: Formulation of Mission, Goals, and Objectives; Strategy Formulation; Organization and Systems Design; and Implementation and Evaluation. Two were found to be significant at .05 level. They were Institutional Analysis and External Analysis with t-value of 2.23 and 1.44, respectively.

The descriptive statistics indicate that the level of institutional application of strategic planning as perceived by respondents in large

institutions was higher than that perceived by respondents in small institutions. In other words, administrators and faculty in large institutions tend to view their institutions as applying more strategic planning than those in small institutions.

Level of application by large, medium-sized, and small institutions.

The results of analysis of variance (ANOVA) concerning "Actual Practice" and "Suggested Application" by sizes of institutions are shown in Table 11 to confirm the results already obtained in Research Question Four.

The units of analysis and comparison were the respondents in large institutions (88 administrators and 118 faculty) totaling 206; the respondents in medium-sized institutions (78 administrators and 141 faculty) totaling 218, and the respondents in small institutions (56 administrators and 74 faculty) totaling 130. Analysis of variance (ANOVA) was conducted to compare the relationship between levels of perceptions and sizes of institutions.

The Student-Newman Keuls results indicated that with the significant difference at the .05 level, the means must be at least 2.85 different. Likewise, the difference of means must be at least 3.6 to be significant at the .01 level.

Concerning "Actual Practice," the results of ANOVA show the F-ratio relating to the differences in means of perception levels of institutional application of strategic planning of respondents between large and medium-sized, and between large and small institutions were as follows: F-ratio = 61.34 in Institutional Analysis, F-ratio = 44.15 in Formulation of Mission, F-ratio = 58.42 in External Analysis, F-ratio = 107.66 in Strategy Formulation, F-ratio = 60.29 in Organization and Systems Design, and F-ratio = 54.93 in Implementation and Evaluation. All F-ratios were found to be statistically significant at the .01 level.

Table 11

ANOVA Results on Actual Practice and Suggested Application by Size of Institution

		Actual Practice			Suggested Application		
	n	Mean	SD	F-ratio	Mean	SD	F-ratio
Institutional Analysis							
Large Institutions	206	45.11	5.93	61.34**	52.06	5.04	18.76*
Medium Institutions	219	39.87	6.43		50.14	5.76	
Small Institutions	130	38.28	5.90		48.34	5.77	
Formulation of Mission, Goals, and Objectives							
Large Institutions	206	28.11	5.53	44.15**	34.36	4.15	8.50**
Medium Institutions	219	24.46	5.36		33.13	4.41	
Small Institutions	130	22.76	5.40		32.45	4.65	
External Analysis							
Large Institutions	206	25.62	4.21	58.42**	29.82	3.80	18.63**
Medium Institutions	219	22.25	4.63		28.85	3.76	
Small Institutions	130	20.52	4.56		27.20	3.99	
Strategy Formulation							
Large Institutions	206	32.51	5.78	107.06**	39.68	5.03	25.01**
Medium Institutions	219	27.44	6.11		37.54	5.32	
Small Institutions	130	23.14	5.43		35.56	5.55	
Organization and Systems Design							
Large Institutions	206	31.38	6.31	60.29**	39.04	4.46	8.32**
Medium Institution	219	26.80	5.73		37.89	5.16	
Small Institutions	130	24.41	5.97		36.85	5.03	
Implementation and Evaluation							
Large Institutions	206	26.80	6.04	54.93**	34.75	4.43	17.22**
Medium Institutions	219	23.15	5.53		33.27	4.83	
Small Institutions	130	20.01	6.23		31.56	5.54	

* $p < .05$ ** $p < .01$

Concerning "Actual Practice" and considering the means of large, medium-sized, and small institutions using the results from Student-Newman Keuls, it can be said that in large institutions the levels of institutional application of strategic planning were different from the levels of institutional application in medium-sized and small institutions at a statistically significant level. When compared the means of medium-sized and small institutions, the differences in the degree of use could be found in only two components: Strategy Formulation and Implementation and Evaluation. For the Organization and Systems Design, the difference was nearly significant.

Concerning "Suggested Application," the results of ANOVA show that the F-ratios indicating the difference in means of perception levels of institutional application of strategic planning of respondents between large and medium-sized, and between large and small institutions were 18.76 for F-ratio in Institutional Analysis, 8.5 for F-ratio in Formulation of Mission, 18.63 for F-ratio in External Analysis, 25.01 for F-ratio in Strategy Formulation, 8.32 for F-ratio in Organization and Systems Design, and 17.22 for F-ratio in Implementation and Evaluation. All six F-ratios were found to be statistically significant at the .01 level.

Using ANOVA, the findings confirmed the results that the perceived levels of institutional application of strategic planning concerning "Actual Practice" and "Suggested Application," varied according to size of the institution. In other words, the larger the institution, the higher the level of institutional application of strategic planning of the six components. Therefore, it could be concluded that levels of institutional application of strategic planning as perceived by respondents in large institutions were observed to

be higher than levels of institutional application of strategic planning as perceived by respondents in medium-sized institutions and in small institutions at a statistically significant level of .01. But the differences in perception levels of institutional application of strategic planning between medium-sized institutions and small institutions were found in only two components: Strategy Formulation and Implementation and Evaluation. For the Organization and Systems Design, the difference was nearly significant (see Table 11).

Findings of Research Question Five

Research Question Five: What common components of strategic planning are perceived to have a priority ranking in the selected institutions of higher education?

- a. As perceived by administrators.
- b. As perceived by faculty members.
- c. As perceived by both administrators and

a. As perceived by administrators. Administrators' perceptions concerning "Suggested Application" for each component of strategic planning and t-test results are shown in Table 12. The main purpose was to find common characteristics or components of strategic planning perceived by administrators to be of high priority in the institutions of the study. Two units of analysis were considered. A group of 88 administrators in large institutions formed one unit of analysis, and a group of 56 administrators in small institutions formed another.

Table 12 shows the means, t-values in matrix form, and rankings of the levels of institutional application of strategic planning of the six components concerning suggested application as perceived by administrators in large and small institutions. The rankings of the six components in both large and small institutions were arranged as the results of paired t-tests.

Table 12

T-Test Results (T-values of Paired Samples) of Administrators' Perception on Suggested Application for Each Dimension of Strategic Planning

Large Institutions (n = 88)					
			Mean	SD	Rank
Institutional Analysis			4.35	0.44	1
Formulation of Mission			4.34	0.49	1
External Analysis			4.25	0.59	1
Strategy Formulation			4.04	0.46	6
Organization and Systems Design			4.41	0.46	1
Implementation and Evaluation			4.44	0.51	1
	Form	Ext.	Strat.	Org.	Imp.
Ins.	0.21	1.66	6.20**	1.40	1.66
Form.		1.63	6.18**	1.67	1.94
Ext.			4.13**	3.13*	3.70**
Strat.				8.49**	8.95**
Org.					0.79
Small Institutions (n = 56)					
			Mean	SD	Rank
Institutional Analysis			4.07	0.52	1
Formulation of Mission			4.18	0.55	1
External Analysis			3.99	0.52	1
Strategy Formulation			3.65	0.55	6
Organization and Systems Design			4.18	0.57	1
Implementation and Evaluation			4.03	0.66	1
	Form	Ext.	Strat.	Org.	Imp.
Ins.	1.61	1.09	5.17**	1.35	0.42
Form.		2.74**	7.20**	0.09	1.80
Ext.			4.77**	2.65*	0.64
Strat.				9.64**	5.68**
Org.					2.57*

* $p < .05$
 ** $p < .01$

The levels of perceptions in institutional application of strategic planning of the six components as suggested by administrators in large institutions were considered. The mean values of institutional application of the six components from the highest to the lowest means were Implementation and Evaluation = 4.44, Organization and Systems Design = 4.41, Institutional Analysis = 4.35, Formulation of Mission = 4.34, External Analysis = 4.25, and Strategy Formulation = 4.04. The component with the highest level of institutional application of strategic planning was Implementation and Evaluation with a mean of 4.44, and the component with the lowest level of institutional application of strategic planning was Strategy Formulation. The means of all six components were almost of equal magnitude. Taken as a whole, the desirable level of institutional application of strategic planning as perceived by administrators in large institutions was above a high level of priority of application.

The results of paired t-tests gave a new ranking to the six components in terms of levels of institutional application of strategic planning. Five components (Institutional Analysis, Formulation of Mission, External Analysis, Organization and Systems Design, and Implementation and Evaluation) were ranked first and were on the same level of importance in application. Strategy Formulation was ranked last among the six components. Since all the means of levels of institutional application of strategic planning of the six components were almost of equal magnitude, they can be considered to have equal importance in institutional application of strategic planning.

From Table 12, the means of levels of institutional application of strategic planning of the six components as perceived by administrators in

small institutions from the highest to the lowest mean were as follows:

Organization and Systems Design and Formulaltion of Mission = 4.18, Institutional Analysis = 4.07, Implementation and Evaluation = 4.03, External Analysis = 3.99, and Strategy Formulation = 3.65. Two components, Formulation of Mission and Organization and Systems Design, were ranked first with mean of 4.18. Strategy Formulation came last of all six components in the priority of application with mean of 3.65.

The ranking of the six components was redone in terms of institutional application of strategic planning as the result of paired t-tests. Five components (Institutional Analysis, Formulation of Mission, External Analysis, Organization and Systems Design, and Implementation and Evaluation) were put on the first rank leaving Strategy Formulation last in the list of six components. As in large institutions, administrators in small institutions perceived the six components to have equal institutional application of strategic planning. Rankings of the six components in levels of institutional application of strategic planning of the two sample groups were the same.

As a whole, the administrators in large institutions and administrators in small institutions perceived the six components to have equal institutional application of strategic planning. The only difference between these two sample groups was that the level of institutional application of strategic planning perceived by administrators in large insitutions was only slightly higher than that perceived by administrators in small institutions.

The level of perception of administrators on "Suggested Application" concerning institutional application of strategic planning can be determined using 88 administrator responses on the six components of strategic planning

for large institutions. For small institutions, 56 administrators responses were used. Paired t-tests were conducted. T-values, means, and standard deviations of each pair of strategic planning components concerning the "Suggested Application" of institutional application of strategic planning process as perceived by administrators of both large and small institutions. The means of the administrators' perception on "Suggested Application" of institutional application of strategic planning in large institutions ranged from the highest mean of 4.44 on "Implementation and Evaluation," to the lowest mean of 4.04 on "Strategy Formulation." All the means on six components were almost of equal magnitudes. The ranking put five variables (Institutional Analysis, Formulation of Mission, External Analysis, Organization Systems and Design, and Implementation and Evaluation) on the same level of importance. Strategy Formulation ranked last in the list of six components. Since all the means of six components were almost of equal magnitude, they can be considered as having equal importance in institutional application of strategic planning.

Regarding small institutions, the highest mean in institutional application of strategic planning belonged to two components (Formulation of Mission, and Organization and Systems Design) with mean of 4.18. The lowest mean of 3.65 was on "Strategy Formulation." The ranking of these five variables (Institutional Analysis, Formulation of Mission, External Analysis, Organization and Systems Design, and Implementation and Evaluation) were the same. "Strategy Formulation" (3.65) ranked last in the list of six components. As in large institutions, administrators in small institutions perceived the six components to have equal importance in the strategic planning of the institution.

As a whole, the administrators in large institutions and administrators in small institutions gave equal importance to all the six variables in institutional application of strategic planning. The only difference was that the level of institutional application of strategic planning perceived by administrators in large institutions was only slightly higher than that perceived by administrators in small institutions.

b. As perceived by faculty. To answer part b of Research Question Five, faculty's perception on suggested application for each component of strategic planning, paired t-tests were conducted and the results are shown in Table 13.

The sample for analysis was composed of 118 faculty in large institutions and 74 faculty in small institutions. Means, t-values in matrix form, and rankings of the levels of institutional application of strategic planning of the six components concerning Suggested Application as perceived by faculty in large and small institutions provided common characteristics of strategic planning as perceived to have priority in the institutions of the study.

Considering the levels of institutional application of strategic planning as suggested by faculty in large institutions, the mean values of institutional application of the six components from highest to lowest means were Institutional Analysis = 4.33, Organization and Systems Design = 4.28, External Analysis and Implementation and Evaluation = 4.27, Formulation of Mission = 4.26, and Strategy Formulation = 3.92. Institutional Analysis was ranked first with mean of 4.33 and Strategy Formulation was ranked last with mean of 3.92. Using the results of t-tests in ranking the levels of institutional application of strategic planning of the six components, five components were ranked first, namely, Institutional Analysis (4.33), Formulation of Mission (4.26), External Analysis (4.27), Organization and Systems Design (4.28), and

Table 13

T-Test Results (T-values of Paired Samples) of Faculty's Perception on Suggested Application for Each Dimension of Strategic Planning

Large Institutions (n = 118)					
			Mean	SD	Rank
Institutional Analysis			4.33	0.40	1
Formulation of Mission			4.26	0.54	1
External Analysis			4.27	0.51	1
Strategy Formulation			3.92	0.53	6
Organization and Systems Design			4.28	0.52	1
Implementation and Evaluation			4.27	0.57	1
	Form	Ext.	Strat.	Org.	Imp.
Ins.	1.65	1.48	8.35**	1.12	1.15
Form.		0.11	7.47**	0.55	0.24
Ext.			8.80**	0.46	0.12
Strat.				9.52**	9.49**
Org.					0.33
Small Institutions (n = 74)					
			Mean	SD	Rank
Institutional Analysis			3.99	0.45	1
Formulation of Mission			3.96	0.59	1
External Analysis			3.81	0.60	1
Strategy Formulation			3.49	0.55	6
Organization and Systems Design			4.03	0.54	1
Implementation and Evaluation			3.88	0.72	1
	Form	Ext.	Strat.	Org.	Imp.
Ins.	1.51	3.27**	8.39**	0.64	1.84
Form.		2.70**	8.43**	1.05	1.33
Ext.			6.24**	4.06**	1.16
Strat.				10.49**	6.29**
Org.					3.30**

* $p < .05$

** $p < .01$

Implementation and Evaluation (4.27). Strategy Formulation with mean of 3.92 came last in the list of six components. All the means of six components were almost of equal magnitude. In general, the priority of institutional application of strategic planning as perceived by the faculty in large institutions was above the high level of involvement.

In small institutions, the mean levels of institutional application of strategic planning as perceived by faculty from the highest to the lowest mean were Organization and Systems Design = 4.03, Institutional Analysis = 3.99, Formulation of Mission = 3.96, Implementation and Evaluation = 3.88, External Analysis = 3.81, and Strategy Formulation = 3.49. The highest mean of institutional application of strategic planning was Organization and Systems Design and the lowest was Strategy Formulation. From the results of t-tests, t-values were presented in matrix form and ranking was done with the six components from highest level of application = 1 to lowest level of application = 6. The ranking in the list of six components in strategic planning according to level of institutional application as perceived by faculty in large institutions was the same as that perceived by faculty in small institutions. Five components (Institutional Analysis, 3.99; Formulation of Mission, 3.96; External Analysis, 3.81; Organization and Systems Design, 4.03; and Implementation and Evaluation, 3.88) were ranked first in terms of levels of application. Strategy Formulation (3.49) was ranked last.

In brief, the faculty in both large and small institutions gave almost equal importance to all the six elements. The difference was in the level of institutional application of strategic planning. Faculty in large institutions perceived a higher level of institutional application of strategic planning than those in small institutions.

c. As perceived by both administrators and faculty combined. The combined perceptions of administrators and faculty on suggested application for each component of strategic planning and t-test results are shown in Table 14.

Two units of analysis were formed and the results compared to find common components of strategic planning as perceived to be of high priority in the institutions under the study. One unit of analysis was a combined group of 206 respondents comprising 88 administrators and 118 faculty in large institutions. The data obtained from this sample group were tabulated and analyzed. Means, t-values in matrix form, and ranking of institutional application of strategic planning of the six components are shown in Table 14. The mean levels of institutional application of strategic planning perceived to be of high priority by a combined group of administrators and faculty in large institutions from the highest to the lowest mean were Institutional Analysis = 4.34, Formulation of Mission = 4.29, External Analysis = 4.26, Organization and Systems Design = 4.34, and Implementation and Evaluation = 4.34. Three components (Institutional Analysis, Organization and Systems Design, and Implementation and Evaluation) were ranked first with the same mean of magnitude = 4.34. Strategy Formulation ranked last in the list of six components with mean of 3.97. Using t-test results to rank the six components in terms of levels of institutional application of strategic planning, five components ranked first: Institutional Analysis (4.34), Formulation of Mission (4.29), External Analysis (4.26), Organization and Systems Design (4.34), and Implementation and Evaluation (4.34). Strategy Formulation (3.97) ranked last.

Table 14

T-Test Results (T-values of Paired Samples) of Administrators' and Faculty's Combined Perceptions on Suggested Application for Each Dimension of Strategic Planning

Large Institutions (n = 206)					
			Mean	SD	Rank
Institutional Analysis			4.34	0.42	1
Formulation of Mission			4.29	0.52	1
External Analysis			4.26	0.54	1
Strategy Formulation			3.97	0.50	6
Organization and Systems Design			4.34	0.50	1
Implementation and Evaluation			4.34	0.55	1
	Form	Ext.	Strat.	Org.	Imp.
Ins.	1.48	2.23	10.37**	0.01	0.13
Form.		1.04	9.71**	1.45	1.43
Ext.			9.12**	2.49*	2.41*
Strat.				12.78**	13.05**
Org.					0.20
Small Institutions (n = 130)					
			Mean	SD	Rank
Institutional Analysis			4.03	0.48	1
Formulation of Mission			4.05	0.58	1
External Analysis			3.88	0.57	5
Strategy Formulation			3.56	0.56	6
Organization and Systems Design			4.09	0.56	1
Implementation and Evaluation			3.94	0.69	1
	Form	Ext.	Strat.	Org.	Imp.
Ins.	0.63	3.05**	9.57**	1.45	1.59
Form.		3.85**	11.09**	0.85	2.19*
Ext.			7.80**	4.75**	1.29
Strat.				14.27**	8.50**
Org.					4.18**

* $p < .05$ ** $p < .01$

The respondents (administrators and faculty) in large institutions perceived the levels of institutional application of strategic planning of the six components to be equal but the overall desired level of institutional application was above "high" in level of priority.

The second unit of analysis was a combined group of 130 respondents—56 administrators and 74 faculty. Also Table 14 shows means, t-values in matrix form, and ranking of the six components in terms of levels of institutional application of strategic planning perceived to be desirable by the combined group. The mean levels of institutional application of strategic planning perceived to be desirable by a combined administrators and faculty in small institutions were as follows: Institutional Analysis = 4.03, Formulation of Mission = 4.05, External Analysis = 3.88, Strategy Formulation = 3.56, Organization and Systems Design = 4.09, and Implementation and Evaluation = 3.94. Organization and Systems Design (4.09) had the highest mean and Strategy Formulation (3.56) received the lowest mean of institutional application of strategic planning.

T-test results ranked five components [Institutional Analysis (4.03), Formulation of Mission (4.05), Organization and Systems Design (4.09), and Implementation and Evaluation (3.94)] first in priority. External Analysis (3.88) ranked fifth and Strategy Formulation (3.56) ranked sixth.

Rankings of the six components in levels of institutional application of strategic planning in both sample groups were almost the same. The mean levels of institutional application of strategic planning perceived to be desirable by the respondents in large institutions were almost equal in magnitude. The same can be mentioned of the mean levels of institutional application perceived to have priority by respondents in small institutions.

When administrators and faculty in large and small institutions were combined, the means obtained in the analysis of data drawn from the combined group in small institutions seemed to be slightly lower than in large institutions. Similar patterns of ranking could also be observed. The most recommended components common to large and small institutions were Institutional Analysis; Formulation of Mission, Goals, and Objectives; Organization and Systems Design; and Implementation and Evaluation. The least recommended component common to both was "Strategy Formulation." The only difference was that "External Analysis" was in the most recommended group for large institutions and it was just before what was least recommended for small institutions. The difference was very small (see Table 14).

From paired t-tests in three cases mentioned above, what was common to the results obtained for both large and small institutions was that "Strategy Formulation" was the least desirable element in strategic planning. In small institutions, the elements recommended for application in order of precedence were: Organization and Systems Design, Formulation of Mission, Institutional Analysis, Implementation and Evaluation, External Analysis, and Strategy Formulation. The ranking of suggested application in large institutions from the highest to the lowest were: Institutional Analysis, Implementation and Evaluation, Organization and Systems Design, Formulation of Mission, External Analysis, and Strategy Formulation.

Summary

The information gathered from the interviews conducted with the 10 presidents of selected private colleges and universities was reported in

conjunction with the six components of strategic planning. Then, the five research questions were answered utilizing quantitative data collected from the survey to determine the levels of institutional application of strategic planning in relation to roles of the respondents and to sizes of the institutions.

CHAPTER V

SUMMARY, CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

This chapter presents the overall summary of the research study in relation to the literature, study findings, conclusions, and recommendations. The chapter is divided into four sections. The overview of the study includes the statement of the problem, the purpose of the study including pertinent literature, and the research methodology. The second section summarizes the most significant findings of the study according to the five research questions. Conclusions and discussion of the findings are in the third section. In the final section of Chapter V, recommendations for future study and recommendations for practice in institutions are offered.

Overview of the Study

The study was based on studies, reports and research provided in the literature. The study focused on perceptions of presidents, administrators and faculty from 10 selected private colleges and universities in Bangkok, Thailand, on the application of strategic planning.

Statement of the Problem

To accomplish any kind of activity, strategy is involved and thus strategic planning is its simplest form. Strategic planning in its elementary form was a cooperative activity of a hunting party to capture large game (Henderson, 1983). More complex strategic planning was seen in tribal wars

or in military operations (Evered, 1983; Henderson, 1983; Pfeiffer, 1986; Morrison, Renfro, & Boucher, 1984). Strategic planning evolved through time and under different conditions. It was adopted for use in business as early as 1850 (Chandler, 1962). The emphasis of utilizing strategic planning differed according to the status of the national economy at different periods (McCorkle & Archibald, 1982). It took different forms, such as budgeting and financial control, long-range planning, business strategic planning, corporate strategic planning, and strategic management (Hax & Majluf, 1984).

Actually, strategic planning was initiated in academe, but university authorities were slow to apply it (Cyert, 1981). Many researchers have recommended it to be applied in academic organizations (Cope, 1987; Kotler & Murphy, 1981; Kotler & Andreasen, 1991; Keller, 1983).

In the application of strategic planning, there have been incidents of both successes and failures (Doyle & Lynch, 1979; Toll, 1982). But the successes outnumbered the failures, and the failures tended to be due to a misunderstanding of the concept of strategic planning (Pfeiffer, Goodstein, & Nolan, 1986) or a misapplication of strategic planning (Hunsicker, 1986).

As a whole, in spite of misapplications and failures, most researchers seem to agree that strategic planning is useful. It can be applied to a comprehensive program or to a specific area (Rothwell & Sredl, 1992) and in any type of organization, profit as well as nonprofit (Cyert, 1981).

There are as many models of strategic planning as there are authors. There is no one best model in its application (Lorange, 1982). The common elements found in the models presented in the literature are: goal formulation, environmental analysis; institutional analysis; and formulation of strategy. In this study, six components were conceptualized into a

framework for strategic planning, including the following: Formulation of mission, goals and objectives; external environmental analysis; institutional analysis; strategy formulation; organization of systems and design; and implementation and evaluation. This framework was adapted from the strategic planning model process of Kotler and Murphy (1981). The situation in Thailand at present is similar to the United States in the early 1970s during the period of growth in higher education. A period of uncertainty followed. Many institutions were caught unaware. Strategic planning can be used to direct an institution and thus contribute to its growth and development. It is useful to know the level of application of strategic planning in academic institutions, especially in the private sector, so that the appropriate application of strategic planning can help sustain the life of the institution.

Purpose of the Study

The purpose of this study was to survey the application of strategic planning in selected private colleges and universities in Bangkok, Thailand. The study utilized the perceptions of administrators and faculty members to determine the level of strategic planning in these selected institutions. Moreover, the study included the differences in perceptions of this application in terms of roles of the respondents and sizes of the institutions.

Research Design and Methodology

Population and sample. The sample included three subgroups from 10 selected private colleges and universities in Bangkok, Thailand. The first group involved all 10 presidents for the interviews; the second group was comprised of 250 administrators; and the third group included 515 randomly selected faculty members for a total survey population of 765 individuals.

Instrumentation. The instruments employed in the study consisted of a set of interview questions to inquire about the actual practice of strategic planning from the presidents, and a questionnaire designed to measure the level of institutional application of strategic planning as perceived by administrators and faculty members. The presidents were asked about various activities they had performed that gave indication of institutional application of strategic planning. The administrators and faculty members gave their perceptions of the actual practice and suggested practice of various activities undertaken by the institutions that indicated institutional application of strategic planning.

Data collection and analysis. The researcher interviewed the 10 presidents personally. Permission was obtained from each president to collect data in the institution. Questionnaire items and statistical procedures were designed to answer the five research questions.

Statistics utilized to analyze the data for the five research questions included means, standard deviations, t-tests of independent groups, and paired t-tests. All data were analyzed with SPSS/PC+. The .05 level was used as the statistical level of significance.

Summary of Findings

The following results were obtained according to each of the five research questions.

Research Question One

What are the perceptions of administrators concerning the level of institutional application of strategic planning?

In the survey, the following five levels of priority were employed:

level 1 = none, designated no level of institutional priority in strategic

planning at all or that the respondent had no knowledge of its application; level 2 = some, designated that there was a certain level of institutional priority in strategic planning; level 3 = moderate, designated moderate priority in strategic planning in the institution; level 4 = high, designated high level of institutional priority in strategic planning; and level 5 = highest, meant that the institution had a very high level of priority in strategic planning.

From the perceptions of administrators on "Actual Practice" of strategic planning in large universities, the mean values of the responses regarding the six variables as essential components in strategic planning showed that the level of institutional application on "Actual Practice" of strategic planning was slightly above moderate in level of participation. Means ranged from 3.32 to 3.82 with an average mean of 3.58. Administrators in small institutions perceived a lower level of institutional priority in strategic planning ranging from 2.41 to 3.34 with an average mean of 2.89. The gap between the average mean of administrators' perceptions in large institutions (3.58) and the average mean of administrators' perceptions in small institutions (2.89) seemed to be wider.

The administrators tended to view activities in the institution on a daily basis (what was tangible and concrete) before they observed what was abstract. They perceived the following activities being done often, if not daily: Institutional Analysis, Formulation of Mission, External Analysis, and Organization and Systems Design. Implementation and Evaluation was also in regular use, but in the Thai culture, evaluation is in the area that is most neglected (Santasombat, 1994). "Strategy Formulation" was the embodiment of the first three components and was rather abstract. The process involves

many other factors which sometimes cannot be identified concretely. Strategy comes to life only in action plan or implementation. Sometime, people overlook this aspect of planning.

The means of perception of administrators in large institutions were higher than those in small institution. In large institutions, there are more opportunities for putting strategies into action due to the availability of resources. When institutions grow, expansion results in many activities. Thus, administrators in large institutions gave higher ratings than those in small institutions.

Research Question Two

What are the perceptions of faculty members concerning the level of priority of institutional application of strategic planning?

In answering Research Question Two, the following five levels of priority of institutional involvement in strategic planning were used: level 1 = none, designated no level of institutional priority in strategic planning at all or that the respondent had no knowledge of its application; level 2 = some, designated that there was a certain level of institutional priority in strategic planning; level 3 = moderate, designated moderate priority in strategic planning in the institution; level 4 = high, designated high level of institutional priority in strategic planning; and level 5 = highest, meant that the institution had a very high level of priority in strategic planning.

The levels of priority of institutional application of strategic planning as perceived by faculty in large universities was moderate. The range of means was from lowest 3.20 to highest 3.71 with an average mean of 3.43. On the other hand, the level of priority of institutional application of strategic planning as perceived by faculty in small institutions showed a lower result

with mean values ranging from lowest of 2.24 to 3.07 and an average mean of 2.63. The gap between the average mean of perception of faculty in large institutions (3.43) and the average mean of perception of faculty in small institutions (2.63) was considered wide.

The faculty in large institutions observed many activities being applied in the institutions due to availability of funds. They had more plans and projects to implement. The faculty in small institutions had seen and experienced institutional plans and activities too, but to a lesser degree. The faculty in the institutions with more institutional activities naturally viewed a higher level of priority in strategic planning than the faculty in the institutions with fewer activities.

Research Question Three

To what extent does the perceived level of priority of institutional application of the strategic planning process vary according to the roles of the respondents?

The analysis of t-tests for individual institution showed no significant difference on the levels of priority of institutional application of the six components of strategic planning as perceived by either administrators or faculty. T-tests between administrators' and faculty's perception on the level of institutional application of strategic planning on both "Actual Practice" and "Suggested Application" gave similar results. Therefore, differences in roles (administrators and faculty) were not related to differences in perception levels of institutional application of strategic planning.

There was no significant difference in priority of application of strategic planning as perceived by administrators and faculty in this study. In private higher education institutions, the administrators and the faculty, at the time

of this study, were working side by side. There were both formal meetings and informal gatherings for various purposes. What was left out of formal meetings and discussions, could have been covered by in informal meetings and discussion. So, to some degree, both administrators and faculty members perceived no significant difference in the priority of institutional application of strategic planning.

Research Question Four

To what extent does the perceived level of priority of institutional application in the strategic planning process vary according to the sizes of the institutions?

The sizes of the institutions in this study were determined from the number of students. Taking institution size into consideration, there were significant differences in means as measured by perceptions of administrators and faculty in both large and small institutions. As mentioned earlier, in large institutions the sample group felt that there were opportunities for expansion, for activities for further growth and development. Financial situation seemed to be the key issue for expansion and growth at the initial stage. Investment at this stage was essential. With large investment in different projects, the application of strategic planning was evident to the administrators and faculty members. Large institutions with more funding can get more involved in various activities. The subjects, therefore, perceived a high level of application of the six components in their institutions in both "Actual Practice" and "Suggested Application."

Research Question Five

What common components of strategic planning are perceived to have a priority ranking in the selected institutions of higher education?

a. As perceived by administrators.

- b. As perceived by faculty.
- c. As perceived by both administrators and faculty combined.

Considering the suggested application of the six components, the administrators and faculty gave the same ranking of the six components in terms of level of institutional priority. Moreover, the perceptions of both administrators and faculty in large and small institutions were almost at the same level with the sample group, with a slightly higher level of perception in large institutions. It was implied that all administrators and faculty wanted to see their institutions improve, grow, and develop. They tended to forget to differentiate between the attainable (what can be achieved) and the desirable (the ideal). Actually, each institution was unique in its own way with different environment, resources, mission, opportunities, and threats. Taking all these factors into consideration, perceptions varied depending on size of the institution.

In combined group (administrators and faculty in large institutions together as a single unit of analysis and administrators and faculty in small institutions as another unit), the results showed that in large institutions, the mean levels of priority of application of strategic planning of the six components as perceived by the sample group were almost of the same level. Paired t-tests ranked five components first and left Strategy Formulation last in the list of six components.

In small institutions, another combined group (administrators and faculty together) had the same perceptions and ranking of priority of application in strategic planning as the sample group in large institutions. The only difference was that, in general, the perception levels of strategic planning of the sample group in large institutions were slightly higher than

the perception levels of application of priority in strategic planning of the sample group in small institutions.

The administrators and faculty in combined groups perceived all six components to have a priority ranking of common components of strategic planning with almost equal levels of priority of application. In order of precedence, the six components recommended for application were: Institutional Analysis, Organization and Systems Design, Formulation of Mission, Implementation and Evaluation, External Analysis and Strategy Formulation.

Conclusions and Discussion

The purpose of the study was to survey the application of strategic planning in selected private colleges and universities in Bangkok, Thailand, regarding the level of priority of strategic planning and to what degree components of strategic planning were being employed in selected private institutions of higher education in Bangkok, Thailand, as perceived by administrators and full-time faculty members.

Strategic Planning as Practiced by the Presidents

From interviews with 10 presidents of selected private colleges and universities, it was concluded that in terms of planning all the presidents gave priority to "Institutional Analysis." This was congruent with the literature that stated that the first stage in the evolution of the institutions involved either budgeting planning (Day, 1984) or financial planning (Gluck, 1986). At this first stage, the institution was in its growth period. Investment in terms of expansion in physical plant, facilities, and program was required (Cameron, 1983).

The second priority according to the opinions of the presidents was in "External Analysis." Presidents seemed to agree that they had to keep in touch with the environment to find opportunities and avoid threats outside the institution (Steiner, 1979). To achieve this objective, they needed to be in continuous contact with the outside world, and both quantitative as well as qualitative analyses were considered (Wilson, 1983). The presidents daily followed current news in all possible areas, particularly in social, political, economic, demographic, business, and technological trends. They attended meetings, made contacts with public and business sectors and made trips abroad. These activities formed an external environmental scanning for the presidents to gather as much data as possible for future decision making. They admitted that no systematic data gathering was done for external environmental analysis.

For "Formulation of Mission," the by-laws of the Ministry of University Affairs stated that every academic institution of higher education, at its inception, was required to have a written mission statement. The formulation of missions, goals, and objectives is an essential part of an institution. As stated in the literature, a mission statement identifies the aim and thrust of an organization (Steiner, 1979), forms the basis of subsequent planning steps (Merson & Qualls, 1979), and reflects what members of the organization really believe in (Drucker, 1990). The presidents affirmed that all activities or decisions taken were in line with the mission of the institutions.

As for "Strategy Formulation," the presidents found themselves continuously engaging in the formulation of various strategies in

institutional planning. They constantly had to find the fit between internal resources and the external environment (Kotler & Murphy, 1981; Cope, 1981).

On "Organization and Systems Design," the level of priority of institutional application in this area was done side by side with other variables. Since the work was assigned to the vice presidents, it was considered to have less emphasis.

Regarding the last variable, "Implementation and Evaluation," the presidents agreed that formal follow-up was weak and less emphasis was put in this area.

Perceptions of Administrators and Faculty

From statistical analysis of the survey, the following conclusions were formulated based on the perceptions of levels of priority of institutional application of strategic planning as perceived by administrators and faculty:

Administrators' perception of actual practice of strategic planning. The administrators in large and small institutions perceived the application of strategic planning on the six components in a similar fashion in terms of priority of institutional application of the six components. The perception of level of priority of administrators in large institutions was higher than that of administrators in small institutions. The level of priority as a whole was considered to be moderate, ranging from highest mean = 3.82 to lowest mean = 2.41 (see Table 5).

Faculty's perception of actual practice of strategic planning. The rankings of the six variables as essential components in strategic planning were similar to perceptions of faculty in both large and small institutions. The perception levels of priority of faculty in large institutions were higher than those of faculty in small institutions.

The level of priority perceived by faculty as a whole was similar to that of the administrators; it ranged from the highest mean = 3.71 to the lowest mean = 2.24 (see Table 6).

Perception on actual practice of combined group. Administrators and faculty in large institutions and administrators and faculty in small institutions were combined to form two new units of analysis. Results were similar to those obtained from the administrators and faculty separately.

Ranking of levels of priority of institutional application of the six components in strategic planning by the combined group in large institutions was similar to that of the combined group in small institutions. The level of priority as perceived by the combined group in large institutions was higher than that of the combined group in small institutions ranging from the highest mean = 3.76 to the lowest mean = 2.31 (see Table 7).

Level of priority in relation to roles. The levels of priority of institutional application of strategic planning were measured against the two roles of administrators and faculty, concerning "Actual Practice" and "Suggested Application." Comparison of means was made by the use of t-tests. There was only one significant difference in "Actual Practice" at the .01 level on "Organization and Systems Design" for large institutions. For small institutions, three components resulted in significant differences at the .01 level, namely, "Institutional Analysis," "Formulation of Mission, Goals, and Objectives" for small institutions (see Table 8). The mean scores of administrators, however, were consistently higher than the faculty mean scores in all instances but one for External Analysis.

Concerning "Suggested Application" in large institutions, t-tests of the differences between mean levels of priority of institutional application of strategic planning perceived by administrators and faculty of the six components showed t-values with no significant differences in components. One component, "Implementation and Evaluation," had a t-value of 2.12; the significant difference was at the .05 level.

In small institutions concerning "Suggested Application," the t-test results of the differences between mean levels of priority of application in strategic planning perceived by administrators and faculty of the six components show t-values with no significant differences in five components. Formulation of Mission was the only component with a significant difference in mean level of priority of application at the .05 level (see Table 9).

It can be concluded that, as a whole and concerning both "Actual Practice" and "Suggested Application," there was no difference in perception level of priority of application in strategic planning in relation to roles of administrators and faculty.

Level of priority in relation to sizes. Levels of priority of application in strategic planning were measured in relation to sizes (large, medium-sized, and small) of the institutions with enrollment as criterion. The combined group of administrators and faculty was considered the unit of analysis in each size of institution. The mean levels of priority of institutional application in strategic planning of a combined group (administrators and faculty) in large institutions were compared to the mean levels of priority of application in strategic planning of another combined group in small institutions. The t-test results showed that the differences between mean

levels of priority of application in strategic planning as perceived by the two sample groups were statistically different at the .01 level in all six components and under both areas of "Actual Practice" and "Suggested Application" (see Table 10).

The analysis of levels of priority of application in strategic planning in relation to sizes was also done with large, medium-sized, and small institutions. Student-Newman Keuls values were used (mean difference of at least 2.85 for significance at the .05 level and mean difference of at least 3.6 to be significant at the .01 level).

The mean differences between levels of priority of application in strategic planning in large and medium-sized, and between large and small institutions were found to be statistically significant at the .01 level in all six components concerning both "Actual Practice" and "Suggested Application" (see Table 11).

It was concluded from two analyses of levels of application in relation to sizes of institutions that the levels of priority of application of the six components in strategic planning as perceived by respondents in large institutions were significantly different from medium-sized and from small institutions. In other words, large institutions tended to have higher levels of priority of application in strategic planning than did smaller institutions (see Tables 10 and 11)

Common Components of Strategic Planning

To determine common components of strategic planning perceived to have a priority ranking in the institutions under the study, three sample groups were formed. Administrators from large and small institutions formed the first sample group; faculty from large and small institutions

formed the second sample group; and administrators and faculty combined from large and small institutions formed the third sample group.

As perceived by administrators. A sample group of administrators was divided into two units of analysis, with 88 administrators from large institutions in one group and with 56 administrators from small institutions in another.

In both sample groups, the respondents perceived all six components to have almost equal importance in the application of strategic planning. The mean values of the six components were close together in each group. Moreover, the rankings of the levels of priority of application in strategic planning of the six components were the same in both groups. The only difference was in the levels of priority of application in strategic planning. The levels of priority of application in strategic planning as perceived by administrators in large institutions (average mean = 4.30) was higher than the levels of priority of application in strategic planning as perceived by administrators in small institutions (average mean = 4.01).

The following components had a priority ranking of moderate or high in the application of strategic planning: Institutional Analysis, Formulation of Mission, External Analysis, Organization and Systems Design, Implementation and Evaluation, and Strategy Formulation. Though Strategy Formulation was least in priority ranking, the mean level of priority of application in strategic planning perceived was very close to the mean levels of priority of application of other components in strategic planning (see Table 12).

As perceived by faculty. A sample group of faculty was composed of 118 faculty in large institutions and 74 faculty in small institutions to form two units of analysis.

In both units of analysis, the mean values of the six components in each group were almost equal. The respondents considered these six components to have equal importance in their application of priority in strategic planning. Moreover, both groups obtained the same ranking. The difference was in the mean levels of priority of application in strategic planning as perceived by faculty in large institutions which was higher than those perceived by faculty in small institutions.

Components found to have a priority ranking by faculty were: Institutional Analysis, Formulation of Mission, External Analysis, Organization and Systems Design, Implementation and Evaluation, and Strategy Formulation. Strategy Formulation was least in priority ranking of all six components, but it was considered to be important in its application of priority (see Table 13).

As perceived by combined group. Administrators and faculty in large institutions were combined to form one unit of analysis and administrators and faculty in small institutions were combined to form the second unit of analysis. There were 206 respondents in large institutions and 130 respondents in small institutions.

From means, t-values in matrix form, and rankings as shown in Table 14, in both groups of large and small institutions, the mean values of all six components were almost the same. The levels of priority of application in strategic planning perceived by respondents in large institutions were higher than those perceived by respondents in small institutions.

Components found to have a priority ranking with the combined groups were: Institutional Analysis, Formulation of Mission, Organization and Systems Design, Implementation and Evaluation, External Analysis, and

Strategy Formulation. Strategy Formulation was the least in priority ranking but remained important in its application to strategic planning.

Concerning "Suggested Application," the levels of priority of application of the six components in strategic planning were perceived to be the same by administrators, faculty, and administrators and faculty combined. The difference in perception level was in relation to size. Common components of strategic planning perceived to have a priority ranking in the institutions under the study were: Institutional Analysis, Formulation of Mission, External Analysis, Organization and Systems Design, Implementation and Evaluation, and Strategic Planning. Participants considered all components equally important to the institutions.

Interview and Survey Result Differences

From the analyses of in-depth interviews of the presidents of selected institutions and from the analyses of the data gathered from the survey of administrators and faculty concerning the application of different components in strategic planning process, the interview and the survey results agreed on the following points:

1. Both the interviews and the survey showed that the component "Institutional Analysis" ranked first in terms of level of priority of application to strategic planning. The presidents stated very emphatically that they made use of "Institutional Analysis" most in institutional planning. The administrators and faculty also perceived that higher authorities used data gathered from the internal resources as important bases of administration and development more than other components. This result was found in both large and small institutions. The only difference was in

the level of utility, that is, large institutions made use of data in this area more than small institutions.

Those involved in strategic planning must engage in "Institutional Analysis" (to identify all aspects of resources, in the institution) to be able to make effective decisions in terms of tangible and intangible allocation of resources (Kotler & Fox, 1985).

2. Next in importance to institutional application of strategic planning was "External Analysis." All the presidents interviewed accepted that they had to gather information on the economic, technological, political, and social surroundings to keep their institutions in balance with the outside world and move toward their goals and objectives (Aguilar, 1967; Clagett, 1988-89).

The results obtained from the three sample groups confirmed the same results, that is, the administrators and faculty from large, medium-sized, and small institutions rated perception levels of priority of application on "External Analysis" as high as "Institutional Analysis." They admitted that they did not make use of research or systematic ways of data-gathering in order to learn about the rate of changes outside. They used secondary data and personal experiences in planning.

3. Next in the ranking of levels of priority of application in strategic planning was "Formulation of Mission, Goals, and Objectives." Mission, goals, and objectives give sense of purpose and direction to the institution (Steiner, 1979; Drucker, 1990). This third ranked component was perceived to be as important as "External Analysis." Besides being a guideline to the first two components, it acted also as an important starting point in the administration of educational institutions, the success of which depended

largely on its clarity and the importance given to it by the high level administrators (Merson & Qualls, 1979, pp. 25-31).

The Ministry of University Affairs required that a mission statement accompany every application for the establishment of an educational institution (Ministry of University Affairs, 1992). Some of the administrators and faculty had no knowledge or did not pay attention to the mission statement and did not give due importance to this aspect of the institution. This was observed in the survey responses, but there were a lot of variations in those responses.

As stated in the summary under "The Concept of Strategic Planning" of Chapter II, strategic planning is comprised two main parts, an intellectual aspect and an administrative task. Internal and external analysis, which are an important foundation of the first part, must be implemented under the umbrella of the institution's mission statement.

From the analysis of the interviews of the presidents, the researcher believed that higher-level administrators utilized the data obtained from the "Internal and External Analysis" and reflected on the plans implemented in congruence with the mission, goals, and objectives of the institutions. The only thing they ignored was that there was no step or system of approach in the process. In the interviews as well as in the surveys, the presidents and the respondents stated clearly that their institutions had made use of mission statements, goals, and specific objectives relative to and consistent with each other. Moreover, the rating on "Participation of executive committee in formulating policies, plans, and objectives" was high ($\bar{X} = 3.90$) demonstrating that the sample groups had knowledge of the use of information obtained

from the internal and external analysis in the administrative tasks and in congruence with the mission statement of the institution.

The rate of growth and development of large institutions has been documented by the survey results. The increases in facilities, teaching staff and students; the expansion through new construction and new campuses; and the procurement of well-equipped facilities and other educational necessities are signs of growth and development of the institution and have created a new status and popularity for private higher education institutions in the eyes of the public. These private institutions are even considered on par with state universities in spite of the fact that state universities have been in existence much longer than private higher education institutions and are subsidized by the state.

4. The other three components "Strategy Formulation," "Organization and Systems Design," and "Implementation and Evaluation" were considered to be the second part, the administrative task. The second part bases its activities on the first.

Concerning the fourth component "Strategy Formulation," the interviews with the presidents revealed that they had employed various means as strategies. Large institutions could afford to put up new buildings to increase facilities for increasing numbers of students. In one way, these strategies could be used to improve quality in education. Whatever means each institution was employing, the outcome was geared toward the mission of the institution. Large institutions had an advantage over small institutions in this regard since there were many factors involved in strategy formulation.

Strategy formulation must be translated into action. It was, therefore, objective and observable. The analysis of the survey responses showed that

the mean of each item under this component was lower than the means of other components. The sample groups perceived that their institutions made use of "Strategy Formulation" at a low level.

On "Strategy Formulation," the interviews revealed that large institutions had better financial status due to larger numbers of students, assuming that private institutions were tuition dependent. The large institutions had more opportunities to implement strategies than did the small institutions. Expanding the institution by setting up new campuses, opening new academic programs, constructing other facilities, even maintaining programs that are not important to the institution but responsive to the public can be effective strategies. Small institutions cannot do likewise unless they are supported financially from agencies outside. What were considered common strategies employed by both groups of institutions were public relations in different forms and curriculum development to keep up-to-date. On the other hand, what was considered lacking in both groups was a systematic method of data collection and analysis to help support the decision-making process. On the whole, the administrators depended largely on their personal experiences and on secondary sources of data. In large institutions, the decisions on strategy formulation, as with other aspects, were made by a committee, whereas in small institutions, most of the decisions were made by the presidents.

The interviews revealed that institutional and external analyses were used in the decision-making process. On the other hand, the responses showed the mean of "Strategy Formulation" to be lowest in comparison to other components. This result was found in both large and small groups of institutions.

Two things need to be considered here. First, the process of strategy formulation involves intellectual capacity which is abstract and unobservable. The rating for what cannot be seen is, thus, low. Second, what is in congruence with the result of the interviews of the presidents is that large institutions had done more in terms of "Strategy Formulation" than small institutions. The results from survey analysis showed the mean value of large institutions to be statistically different and higher than in small institutions in terms of "Strategy Formulation."

5. In-depth interviews showed that most of the presidents' answers were congruent with those of their institutions, and they designed and organized all the systems and functions systematically. Most of the systems and organization design were done by committees. Only the minority came from the presidents themselves. To make organization systems and design, they had to make use of all the data collected from the external influences and internal resources to find the match between the two.

On the contrary, analysis of the survey presented a result different from that obtained from the interviews. The ratings of the sample groups were not high but still higher than that of "Implementation and Evaluation." The highest ratings of this component from large institutions were moderate under "facilitating inter-office communication at all levels" and "having clear job descriptions for each position." The two items "consistency in updating the management information system" and "acknowledgment and implementation of institutions' plans by the faculty" received low ratings with means = 3.20 and 3.27 (highest = 5, lowest = 1). It is implied that on "Organization and Systems and Design" the administrators and faculty perceived that the organization and systems design of their institutions were

not conducive for faculty and staff to work efficiently. This was due to the line of authority, communication between different administrative offices, the information that flowed through this line, and the lack of personnel appropriate to the task. In sum, Organization and Systems Design was an important factor that contributes to the success of "Implementation and Evaluation." The design process was the link between operational plans and implementation. As Gray (1986) and his colleagues reported, the implementation problems found were due to the organizational and systems design and the way the organization had been managed.

6. On "Implementation and Evaluation," the result from the survey analysis showed that the mean value rated by the administrators and faculty was a little higher than those of "Strategy Formulation." Considering each item under "Implementation and Evaluation," the sample groups presented low ratings in "periodic evaluation of performance based on the plan objectives," "evaluation of institution's achievement based on the standards set in the operational plans," and "making use of academic research and evaluation to improve teaching methodology." It was implied that each *institution carried out the implementation of plans, taking corrective measures, and adjustment of plans to the desired goals* (see Appendix E). This was true in large as well as in small institutions. The lack of systematic assessment resulted in missing information concerning factors that contributed to the success and failure of plans in the process of strategic planning. It is hard to make conclusions on the advantages and disadvantages of the process, and harder to make corrections or adjustments to the plans.

Link between the Interviews and Survey

As a whole, there was congruence between the results of the interviews and the results of the survey on the six components of strategic planning. First, there was no systematic application of strategic planning. Each institution used strategic planning process according to their own understanding. Second, the administrative structure of most of the institutions utilized what could be called top-down management. The nature of the work assignment was in the form of distributive rather than participative management. From the survey analysis, the results show that "Strategy Formulation" and "Implementation and Evaluation," two key components that contribute to success in carrying out planning, were not given due importance. Very often, the administrators and academics mentioned that usually people are good at planning and keep the plans safely on the shelf. Gray (1986) mentioned the success of strategic planning in noting that "Most of the unsuccessful cases came about due to the misfit of one or many parts in the whole mechanism of strategic planning." Third, the steps taken in the process of strategic planning should not necessarily be implemented in succession, but neither should each step be treated separately. A holistic approach to strategic planning process should be used. As Cohen and Cyert (1973) suggested, the whole procedure involves a dynamic feedback process that has neither a beginning nor an end; it is merely for expository convenience that we label the first step as formulating goals.

Limitations of the Study

In this study, the research obtained data from selected private colleges and universities in Bangkok, Thailand. The following limitations must be taken into consideration when interpreting the results.

1. The study was conducted utilizing only private institutions. State universities were excluded from the study in spite of the fact that strategic planning can be applied to any kind of organization (Cyert, 1981).

2. Moreover, among private institutions, only private colleges and universities in Bangkok, Thailand, were involved in the study. Private colleges that catered to only one particular discipline were excluded from the sample to reduce the complexity of the sample. In spite of this attempt, the colleges and universities in the study had unique characteristics of their own.

3. The private institutions surveyed differed in size and tenure of existence, among other differences. Long-established institutions that are stable in terms of management differ from those that are newly-established.

4. In some institutions, many faculty members were new to the job and administrative work. Their perceptions of administrative management were not clear. Consequently, the responses were left to their personal thinking.

5. The classification of private institutions according to size of enrollment created a problem. Institutions might be considered large if they were near the upper limit or low if they were near the lower limit.

6. The results of this study also depended on the nature of the Thai culture and religion that governed the habits of the respondents. The value responses tended to cluster at the moderate level or were either slightly above or lower than the mean. Moreover, the "Suggested Application" in comparison to "Actual Practice" could be something a little bit better than the existing situation instead of a personal suggestion of the application considered from the fit of resources to the environment.

7. The survey instrument had to be translated into Thai so that people who did not understand English could express their views. In the process, the translation may have assumed different meanings from those originally intended and therefore netted different results.

8. The nature of the Thai people is to please everybody. This Thai characteristic gave rise to another limitation in the responses to the questionnaires (Santasombat, 1994). The responses may have reflected what the respondents thought would please the researcher and may not have been the actual feelings of the respondents.

Summary

As we are at the threshold of the year 2000, the rate of change in various aspects of life becomes faster and faster. Billionaires can be turned into street beggars overnight and vice versa. Globalization is here; what happens at one corner of the globe may gravely affect the organization. What happens outside the organization, both in the country or in the world at large, has to be dealt with. Decisions must be made at the right time and in the right place to keep the organization moving with a sense of purpose and to experience growth instead of decline.

Educational institutions in Thailand now, unlike before, are facing the challenge of time. The number of higher education institutions has doubled even tripled, compared to yesteryear. Competition from abroad is increasing. The expansion of higher education institutions in Asia and the attraction of internationalization cause students to flock to institutions abroad instead of attending local institutions. In addition, the new trend in birth control and its effectiveness has reduced the potential population of higher education

institutions. With all these happenings, educational institutions have to employ certain strategies in their operation, not only to survive the turbulent times but also to keep growing in these new surroundings (Keller, 1983).

In Bangkok, Thailand, strategic planning might have been used informally a long time ago. To see the application of strategic planning in higher education institutions in Thailand, the researcher undertook a study of selected private colleges and universities in Bangkok, excluding a few colleges that catered to one particular discipline. Both qualitative and quantitative analyses were done. Interviews were conducted with the president of each selected institution, and questionnaires were distributed to administrators and faculty.

From the interviews, it was clear that all the presidents had applied strategic planning without labeling it as "strategic planning." The application was done with different intensity and with different degrees of success depending on the nature and factors surrounding the institutions. The presidents agreed that the six components of strategic planning are essential to the management of the institutions but applied to different degrees depending on mission, interests, possibilities, and the urgency of the needs.

What was common to all was that the demands of the Ministry of University Affairs in terms of rules and regulations and what could be presented concretely was put into practice. There was no formal quantitative analysis due to lack of systematic data gathering. Most of the decisions were made qualitatively using informal ways of data gathering and years of experience in the office. Strategies differed due to the availability of institutional resources. Financial planning seemed to be a must in every selected institution.

Recommendations

Recommendations for Future Research

This study was conducted under certain limitations. There are still many areas to explore to give a better light to strategic planning. They are as follows:

1. To verify the findings of this study, another investigation should be made to determine the degree of strategic planning being applied in all private colleges and universities in Thailand as perceived by administrators and faculty. Relationships between roles and levels of priority of application of strategic planning and relationships between sizes of the institution and level of priority of application must be established.
2. A study must be made of the application of strategic planning in state universities. As mentioned earlier in Chapter II, strategic planning can be applied to any kind of organization. This would determine the level of application and how strategic planning could be applied effectively.
3. A comparison between private and state institutions of higher learning is recommended to determine the level of priority of application of strategic planning. Further research should be done to determine the varying degrees of intensity and comprehensiveness between public and private colleges and universities as perceived by administrators and faculty.
4. Similar investigation on the application of strategic planning should also be made in the business sector to observe components of strategic planning model that are being applied and to see the similarities and differences of the application between the business sector and institutions of higher learning.

5. A study could also be made in an individual institution to identify factors that contribute to the success and failure of the application of strategic planning. At the same time, factors responsible for success and failure must be identified.

6. Investigation of institutional involvement in strategic planning should be undertaken, since strategic planning itself is a process and involves every member in the institution.

Recommendations for Practice

As in other organizations, private colleges and universities must have a mission to exist. And to be able to continue to exist and grow, these institutions must continue to adapt to changes in the broader social and economic environment and in the ecosystem. The following are recommendations for practice in four major areas:

1. Research in the area of strategic planning in higher education institutions was a starting point for the study. The data and results obtained can serve as a spring board to move to another study in the same area. At the same time, it also helps prepare for the change in the administration of private colleges and universities. At present, the change is from a position free from competition to a market with a lot of competitors. Revision of administration in each institution is necessary to keep the institution "fit" to the outside environment (Kotler & Murphy, 1981).

2. This study will help administrators see the importance of research and make use of it in administrative work. It can also be observed from this study that, in almost all of the components of strategic planning, the research findings be used in management. Moreover, primary data are better than

secondary data in planning and implementation. In the past, administrators made use of their own experiences or simply followed the patterns established by their predecessors.

3. Systematic evaluation of plans is necessary. From this study, the researcher determined that, for all practical purposes, there were no systems of evaluation in both large and small institutions that were helpful in terms of predicting or giving direction for change. The success of planning and implementation relies on this factor, too.

4. Participative management should be employed in the daily operation of the institution. Strategic planning is a process and it involves all the members of the institution. Therefore, to be effective, all members must be part of the planning.

It can be observed that the first private institution of higher learning in Thailand was founded only in 1970 (see Appendix E). At this point in time, with a life span of about 25 years, institutions have been at a particular stage depending on environment of the institutions. They have to pass through a gradual evolution of planning methodologies (St. John, 1987). The challenges facing higher education are fundamentally different from those confronted in the past because of significant changes in the economic and social fabric of the country. Responding to these new challenges, strategic planning would be another tool to help sustain the life of the institution.

REFERENCES

REFERENCES

- Ackoff, R. L. (1981). Creating the corporate future. New York: John Wiley.
- Aguilar, F. J. (1967). Scanning the business environment. New York: Macmillan.
- Allio, R. J. (1988). Thinking and acting strategically. In F. Caropreso (Ed.), Getting value from strategic planning (Conference Board Research Report No. 915, pp. 3-9). New York: Conference Board.
- Altbach, P. G. (1991). Patterns in higher education development: Toward the year 2000. The Review of Higher Education, 14(3), 293-316.
- Andrews, K. R. (1971). The concept of corporate strategy. Homewood, IL: Dow Jones-Irwin.
- Andrews, K. R. (1980). The concept of corporate strategy (rev. ed.). Homewood, IL: Richard D. Irwin.
- Andrews, K. R. (1987). The concept of corporate strategy (3rd ed.). Homewood, IL: Dow Jones-Irwin.
- Ansoff, H. I. (1984). Implanting strategic management. Englewood Cliffs, NJ: Prentice-Hall.
- Ansoff, H. I. (1988). The new corporate strategy. New York: Wiley.
- Ansoff, H. I., Declerck, R. P., & Hayes, R. L. (1976). From strategic planning to strategic management. New York: Wiley.
- Anthony, R. (1965). Planning and control systems. Cambridge, MA: Harvard Graduate School of Business.
- Anthony, W. P. (1985). Practical strategic planning. Westport, CT: Quorum Books.
- Argyris, C. (1993). On organizational learning. Cambridge, MA: Blackwell.

- Austin, J. E. & Kohn, T. O. (1990). Strategic management in developing countries: Case studies. New York: Free Press.
- Balderston, F. E. (1981). Dynamics of planning: Strategic approaches and higher education. New Directions for Higher Education, 35(9), 51-61.
- Barham, K., & Rassam, C. (1989). Shaping the corporate future. Boston, MA: Unwin Hyman.
- Barocas, V. S. (1992). Strategic benefit planning: Managing benefits in a changing business environment (Report No. 1012). New York: Conference Board.
- Birnbaum, W. S. (1990). If your strategy is so terrific, how come it doesn't work? New York: American Management Association.
- Boar, B. H. (1993). The art of strategic planning for information technology: Crafting strategy for the 90s. New York: Wiley.
- Boseman, G., & Phatak, A. (1988). Cases in strategic management. New York: Wiley.
- Bowling, J.C. (1986). Public affairs planning. In J. R. Gardner, R. Rachlin, & H. W. Allen Sweeny (Eds.), Handbook of strategic planning (pp. 18.1-18.21). New York: Wiley.
- Bryson, J. M., Freeman, R. E., & Roering, W. D. (1986). Strategic planning in the public sector: Approaches and directions. In B. Checkoway (Ed.), Strategic perspectives on planning practice (pp. 65-82). Lexington, MA: Lexington Books.
- Cameron, K. (1983). Strategic responses to conditions of decline: Higher education and the private sector. Journal of Higher Education, 54(4), 359-380.
- Capon, N., Farley, J. U., & Hulbert, J. M. (1987). Corporate strategic planning. New York: Columbia University Press.
- Chaffee, E. E. (1984). Successful strategic management in small private colleges. The Journal of Higher Education, 55(2), 212-238.
- Chan, S. S. (1988). Faculty participation in strategic planning: Incentives and strategies. Planning for Higher Education, 16(2), 19-21.
- Chandler, A. (1962). Strategy and structure: Chapters in the history of the American industrial enterprise. Cambridge, MA: MIT Press.

- Checkoway, B. (1986). Strategic perspectives on planning practice. Lexington, MA: Lexington Books.
- Clagett, C. A. (1988-89). A practical guide to environmental scanning: Approaches, sources, and selected techniques. Planning for Higher Education, 17(2), 19-28.
- Cohen, K. J., & Cyert, R. M. (1973). Strategy: Formulation, implementation, and monitoring. The Journal of Business, 46(3), 349-367.
- Cope, R. G. (1981). Strategic planning, management, and decision making (AAHE-ERIC Higher Education Research Report No. 9). Washington, DC: American Association for Higher Education.
- Cope, R. G. (1985). A contextual model to encompass the strategic planning concept: Introducing a newer paradigm. Planning for Higher Education, 13(3), 13-20.
- Cope, R. G. (1987). Opportunity from strength: Strategic planning clarified with case examples (ASHE-ERIC Higher Education Report no. 8). Washington, DC: Association for the Study of Higher Education.
- Curtis, D. A. (1983). Strategic planning for smaller businesses. Lexington, MA: Lexington Books.
- Cyert, R. M. (1975). The management of nonprofit organizations. Lexington, MA: Lexington Books.
- Cyert, R. M. (1981). Management science and university management. New Directions for Higher Education, 35(9), 27-40.
- Day, G. S. (1984). Strategic marketing planning. St. Paul, MN: West.
- Digman, L. A. (1990). Strategic management: Concepts, decisions, cases. Homewood, IL: Irwin.
- Doyle, P., & Lynch, J. E. (1979). A strategic model for university planning. The Journal of the Operational Research Society, 30 (July), 603-609.
- Drucker, P. F. (1969). Summing up: Preparing tomorrow's business leaders today. In P. F. Drucker (Ed.), Preparing tomorrow's business leaders today (pp. 280-290). Englewood Cliffs, NJ: Prentice-Hall.

- Drucker, P. F. (1974). Management: Tasks, responsibilities, practices. New York: Harper & Row.
- Drucker, P. F. (1990). Managing the non-profit organization: Practices and principles. New York: Harper Collins.
- Dube, C. S., & Brown, A. W. (1983). Strategic assessment: A rational response to university cutbacks. Long Range Planning, 16(2), 105-113.
- Ensign, M. S., & Adler, L. N. (1985). Strategic planning: Contemporary viewpoints. Santa Barbara, CA: ABC-Clio Press.
- Eskridge, R. L. (1987). The strategic planning review process. In W. R. King & D. I. Cleland (Eds.), Strategic planning and management handbook (pp. 103-115). New York: Van Nostrand Reinhold.
- Evans, N. D. (1987). Analysis of strategic planning practices of selected private colleges in the Midwest. Unpublished doctoral dissertation, Illinois State University.
- Evered, R. (1983). So what is strategy? Long Range Planning, 16(3), 57-72.
- Farley, J. B., & Schwallie, E. H. (1985). An approach toward successful acquisitions. In J. K. Ryans & W. L. Shanklin (Eds.), Strategic planning, concepts and implementation (pp. 70-82). New York: Random House.
- Fenske, R. H. (1980). Setting institutional goals and objectives. In P. Jedamus, M. W. Peterson, & Associates, Improving academic management: A handbook of planning and institutional research (pp. 177-199). San Francisco, CA: Jossey-Bass.
- Galbraith, J. R., & Nathanson, D. A. (1979). The role of organizational structure and process in strategy implementation. In D. E. Schendel & C. W. Hofer (Eds.), Strategic management: A new view of business policy and planning (pp. 249-283). Boston, MA: Little, Brown.
- Gerstein, M. S. (1987). The technology connection. Reading, MA: Addison-Wesley.
- Gluck, F. W. (1986). Strategic management: An overview. In J. R. Gardner, R. Rachlin, & H. W. Allen Sweeny (Eds.), Handbook of strategic planning (pp. 1.1-1.35). New York: Wiley.
- Goodstein, L. D., Nolan, T. M., & Pfeiffer, J. W. (1992). Applied strategic planning. San Diego, CA: Pfeiffer.

- Grant, J. H. & King, W. R. (1979). Strategy formulation: Analytical and normative models. In D. E. Schendel & C. W. Hofer (Eds.), Strategic management: A new view of business policy and planning (pp. 104-122). Boston, MA: Little, Brown.
- Gray, D. H. (1986). Uses and misuses of strategic planning. In J.W. Pfeiffer (Ed.), Strategic planning: Selected readings (pp. 429-450). San Diego, CA: University Associates.
- Gup, B. E. (1986). Begin strategic planning by asking three questions. In J. W. Pfeiffer (Ed.), Strategic planning: Selecting readings (pp. 217-229). San Diego, CA: University Associates.
- Hammond, M. F. (1984). Survival of small private colleges. Journal of Higher Education, 55(3), 360-388.
- Hax, A. C. & Majluf, N. S. (1984). The corporate strategic planning process. In M. S. Ensign & L. N. Adler (Eds.), Strategic planning: Contemporary viewpoints (pp. 42-43). Santa Barbara, CA: ABC-Clío.
- Hearn, J. C., & Heydinger, R. B. (1985). Scanning the university's external environment: Objectives, constraints, and possibilities. Journal of Higher Education, 56(4), 419-445.
- Henderson, B. D. (1983). The concept of strategy. In K. J. Albert (Ed.), The strategic management handbook (pp. 1-3 to 1-25). New York: McGraw-Hill.
- Henry, H. W. (1967). Long-range planning practices in 45 industrial companies. Englewood Cliffs, NJ: Prentice-Hall.
- Hofer, C. W., Murray, E. A., Charan, R., & Pitts, R. A. (1984). Strategic management: A casebook in policy and planning. New York: West.
- Holdaway, E. A., & Meekison, J. P. (1990). Strategic planning at a Canadian university. Long Range Planning, 23(4), 104-133.
- Hunsicker, J. Q. (1986). The malaise of strategic planning. In J. W. Pfeiffer (Ed.), Strategic planning: Selected readings (pp. 451-461). San Diego, CA: University Associates.
- Inaba, S. (1988). The Japanese experience. In F. Caropreso(Ed.), Getting Value from Strategic Planning (Conference Board Research Report No. 915, pp. 74-79). New York: Conference Board.

- Kauffman, J.F. (1990). Administration then and now. New Directions for Higher Education, 72(9), 99-107.
- Keller, G. (1983). Academic strategy. Baltimore, MD: Johns Hopkins University Press.
- King, W. R., & Cleland, D. I. (1987). Strategic strength-weakness assessment. In W. R. King & D. I. Cleland (Eds.), Strategic planning and management handbook (pp. 374-383). New York: Van Nostrand Reinhold.
- Koontz, H. (1976). Making strategic planning work. Business Horizon, 19(2), 37-47.
- Koontz, H. (1981). Making strategic planning work. In L. Reinharth, H.J. Shapiro, & E. A. Kallmann (Eds.), The practice of planning: Strategic, administrative, and operational (pp. 51-65). New York: Van Nostrand Reinhold.
- Kotler, P. (1986). Strategic planning and the marketing process. In J. W. Pfeiffer (Ed.), Strategic planning: Selected readings (pp. 381-401). San Diego, CA: University Associates.
- Kotler, P., & Andreasen, A. R. (1987). Strategic marketing for nonprofit organizations. Englewood Cliffs, NJ: Prentice-Hall.
- Kotler, P., & Andreasen, A. R. (1991). Strategic marketing for nonprofit organizations. Englewood Cliffs, NJ: Prentice-Hall.
- Kotler, P., & Fox, Karen F. A. (1985). Strategic marketing for educational institutions. Englewood Cliffs, NJ: Prentice-Hall.
- Kotler, P., & Murphy, P. E. (1981). Strategic planning for higher education. Journal of Higher Education, 52(5), 470-489.
- Lawler, E. E. (1990). Strategic pay. San Francisco, CA: Jossey-Bass.
- Lelong, D., & Shirley, R. (1984). Identifying the focal points for action planning. Planning for Higher Education, 12(4), 1-7.
- Lewis, J. (1987). Re-creating our schools for the 21st century. New York: J. L. Wikerson.
- Lewis, J., Jr. (1983). Long-range and short-range planning for educational administrators. Newton, MA: Allyn and Bacon.

- Lindstrom, C. (1984). Planning for higher education. Higher Education in Europe, 9(1), 25-28.
- Loomis, W. (1988). The role of "values" in shaping strategy. In F. Caropreso (Ed.), Getting Value from Strategic Planning (Conference Board Research Report No. 915, pp. 14-16). New York: Conference Board.
- Lorange, P. (1979). Formal planning systems: Their role in strategy formulation and implementation. In D. E. Schendel & C. W. Hofer (Eds.), Strategic management: A new view of business policy and planning (pp. 226-241). Boston, MA: Little, Brown.
- Lorange, P. (1982). Implementation of strategic planning. Englewood Cliffs, NJ: Prentice-Hall.
- Lorange, P., & Vancil, R. F. (1976). How to design a strategic planning system. Harvard Business Review, Sept.-Oct., 75-90.
- Lorange, P., & Vancil, R. F. (1981). How to design a strategic planning system. In L. Reinharth, H. J. Shapiro, & E. A. Kallmann (Eds.), The practice of planning: Strategic, administrative, and operational (pp. 76-85). New York: Van Nostrand Reinhold.
- MacMillan, I. C., & Jones, P. E. (1987). Successful strategy execution via competitive organization design. In W. R. King & D. I. Cleland (Eds.), Strategic planning and management handbook (pp. 456-480). New York: Van Nostrand Reinhold.
- Makridakis, S. & Heau, D. (1987). The evolution of strategic planning and management. In W. R. King, & D. I. Cleland (Eds.), Strategic planning and management handbook (pp. 1-19). New York: Van Nostrand Reinhold.
- Mangieri, J. N. (1993). Academic planning: Some lessons learned. Journal for Higher Education Management, 9(1), 47-51.
- Marx, T. G. (1990). Strategic planning for public affairs. Long Range Planning, 23(1), 1-9.
- McCorkle, C. O., & Archibald, S. O. (1982). Management and leadership in higher education: Applying modern techniques of planning, resource management, and evaluation. San Francisco, CA: Jossey-Bass.

- McGinnis, M. A. (1987). Integrating analysis and intuition: The key to strategic management in a chaotic environment. In W. R. King & D. I. Cleland (Eds.), Strategic planning and management handbook (pp. 629-638). New York: Van Nostrand Reinhold.
- Merson, J. C., & Qualls, R. L. (1979). Strategic planning for colleges and universities: A systems approach to planning and resource allocation. San Antonio: Trinity Press.
- Michel, P. A. (1986). Failures in strategic planning. In J. R. Gardner, R. Rachlin, & H. W. Allen Sweeny (Eds.), Handbook of strategic planning (pp. 11.1-11.13). New York: Wiley.
- Miller, J. L., Jr. (1984). Strategic planning as pragmatic adaptation. Planning for Higher Education, 12(1), 41-47.
- Ministry of University Affairs. (1993). 21st Anniversary of the Ministry of University Affairs. Bangkok: Division of Private Higher Education.
- Ministry of University Affairs. (1992). Rules and regulations on private institutions of higher education. Bangkok: Division of Private Higher Education.
- Mish, F. C. (Ed.). (1991). Webster's ninth new collegiate dictionary. Springfield, MA: Merriam-Webster.
- Mitchell, J. E., & Marks, C. D. (1983). Strategic formulation—A comprehensive illustration. In K. J. Albert (Ed.), The strategic management handbook (pp. 4-1 to 4-36). New York: McGraw-Hill.
- Morrison, J. L., & Cope, R. G. (1985). Using futures research techniques in strategic planning: A simulation. Planning for Higher Education, 13(2), 5-9.
- Morrison, J. L., Renfro, W. L., & Boucher, W. I. (1984). Futures research and the strategic planning process: Implications for higher education (ASHE-ERIC Higher Education Report No. 9). Washington, D.C.: Association for the Study of Higher Education.
- Naisbitt, J. (1982). Megatrends: Ten directions transforming our lives. New York: Warner Books.
- Naylor, M. E. (1983). Planning for uncertainty—The scenario-strategy matrix. In K. J. Albert (Ed.), The strategic management handbook (pp. 22-1 to 22-11). New York: McGraw-Hill.

- Neumann, A. (1993). College planning: A cultural perspective. Journal for Higher Education Management, 8(2), 31-41.
- Office of the Prime Minister. (1991). Thailand in the 90s. Bangkok: Victory Power Point.
- Olenic, A. J., & Olenic, P. R. (1991). A nonprofit organization operating manual. New York: Foundation Center.
- Orlich, D. C. (1978). Designing sensible surveys. New York: Redgrave.
- Pearce II, J. A., & Robinson, R. B. (1982). Strategic management: Strategy formulation and implementation. Homewood, IL: Irwin.
- Pearce II, J. A., & Robinson, R. B. (1991). Strategic management practice: Readings in strategic management. Homewood, IL: Irwin.
- Pearce II, J. A., Robinson, R. B., Jr., & Roth, K. (1987). The company mission as a guide to strategic action. In W. R. King & D. I. Cleland (Eds.), Strategic planning and management handbook (pp. 70-80). New York: Van Nostrand Reinhold.
- Peters, T. J. (1986). Strategy follows structure: Developing distinctive skills. In J. W. Pfeiffer (Ed.), Strategic planning: Selected readings (pp. 405-424). San Diego, CA: University Associates.
- Peterson, M. W. (1980). Analyzing alternative approaches to planning. In P. Jedamus, M. W. Peterson, & Associates, Improving academic management: A handbook of planning and institutional research (pp. 113-163). San Francisco, CA: Jossey-Bass.
- Pfeiffer, J. W. (Ed.). (1986). Strategic planning: Selected readings. San Diego, CA: University Associates.
- Pfeiffer, J. W., Goodstein, L. D., & Nolan, T. M. (1986). Applied strategic planning: A new model for organizational and vitality. In J. W. Pfeiffer (Ed.), Strategic planning: Selected readings (pp. 1-25). San Diego, CA: University Associates.
- Radford, K. J. (1980). Strategic planning: An analytical approach. Reston, VA: Prentice-Hall.
- Ramanujam, V., Camillus, J. C., & Venkatraman, N. (1987). Trends in strategic planning. In W. R. King & D. I. Cleland (Eds.), Strategic

planning and management handbook (pp. 611-627). New York: Van Nostrand Reinhold.

Reinhardt, L., Shapiro, H. J., & Kallman, E. A. (Eds.). (1981). The practice of planning: Strategic, administrative, and operational. New York: Van Nostrand Reinhold.

Rock, R. H. & Eisthen, M. (1983). Implementing strategic change. In K. J. Albert (Ed.), The strategic management handbook (pp. 16-3 to 16-13). New York: McGraw-Hill.

Rosenberg, L. J., & Shewe, C. D. (1985). Strategic planning: Fulfilling the promise. Business Horizon, 28(4), 54-62.

Rothwell, W. J., & Sredl, H. J. (1992). The ASTD reference guide to professional human resource development roles and competencies (2nd ed., vol. I). Amherst, MA: HRD Press.

Rowe, A. J., Mason, R. O., & Dickel, K. E. (1986). Strategic management: A methodological approach. Reading, MA: Addison-Wesley.

Royce, W. S. (1986). The problems with planning. In J. W. Pfeiffer (Ed.), Strategic planning: Selected readings (pp. 103-114). San Diego, CA: University Associates.

Ryans, J.K. (1985). Thinking strategically. New York: Random House.

Santasombat, Y. (1994). Human and culture. Bangkok: Thammasat University.

Sawyer, G. C. (1986). Making plans work: Administering and controlling strategic plans. In J. R. Gardner, R. Rachlin, & H. W. Allen Sweeny (Eds.), Handbook of strategic planning (pp. 8.1-8.19). New York: Wiley.

Schaffir, W. B. (1988). Introduction. In F. Caropreso, Getting value from strategic planning (The Conference Board, Research Report No. 915, pp. iii-xv). New York: Free Press.

Schendel, D. E., & Hofer, C. W. (Eds.). (1979). Strategic management: A new view of business policy and planning. Boston, MA: Little, Brown.

Schmidtlein, F. A., & Milton, T. H. (1988-89). College and university planning: Perspectives from a nation-wide study. Planning for Higher Education, 17(3), 1-19.

- Schoeffler, S. (1983). The PIMS program. In K. J. Albert (Ed.), The strategic management handbook (pp. 23-1 to 23-10). New York: McGraw-Hill.
- Shaklin, W. L. (1985). Strategic business planning: Yesterday, today, and tomorrow. In J. K. Ryans & W. L. Shaklin (Eds.), Strategic planning, concepts and implementation (pp. 61-69). New York: Random House.
- Sinlarat, P. (1987). Higher education and the Thai society: Compilation of critical analyses. Bangkok: Faculty of Education, Chulalongkorn University Press.
- St. John, E. P. (1987). Can strategic planning be applied in developing countries? A comparative perspective on policy and planning in higher education. Planning for Higher Education, 15(4), 5-10.
- Steeple, D. W. (Ed.). (1986). Institutional revival: Case Histories. New Directions for Higher Education, 54(14), 1-106.
- Steiner, G. A. (1979). Strategic planning: What every manager must know. New York: Free Press.
- Steiss, A. W. (1985). Strategic management and organizational decision making. Lexington, MA: Lexington Books.
- Stockman, C. L., & Lewis, C. P. (1990). Strategic planning: Some surprises. Continuing Higher Education, 38(3), 6-9.
- Suwanabol, I., & Jones, C. I. (1990). Corporate planning for Thai state enterprises. Long Range Planning, 23(5), 116-121.
- Tack, M. W., Rentz, A., & Russell, R. L. (1982). Strategic planning for academic programs: A strategy for institutional survival. Planning for Higher Education, 12(4), 8-14.
- Taylor, B. (1987). An overview of strategic planning style. In W. R. King & D. I. Cleland (Eds.), Strategic planning and management handbook (pp. 21-34). New York: Van Nostrand Reinhold.
- Thomas, C., Litschert, R. J., & Ramaswamy, K. (1991). The performance impact of strategy manager coalignment: An empirical examination. Strategic Management Journal, 12(7), 509-522.
- Thompson, A. A., Jr., & Strickland III, A. J. (1992). Strategic management: Concepts and cases (6th ed.). Boston, MA: Richard D. Irwin.

✓ Toffler, A. (1981). The third wave. New York: Bantam Books.

Toll, J. S. (1982). Strategic planning: An increase priority for colleges and universities. Change, 14(4), 36-37.

Whittaker, J. B. (1978). Strategic planning in a rapidly changing environment. Lexington, MA: Lexington Books.

Wilson, I. (1983). The benefits of environmental analysis. In K. J. Albert (Ed.), The strategic management handbook (pp. 9-1 to 9-19). New York: McGraw-Hill.

Young, S. (1981). Some dimensions of strategic planning for higher education. Planning for Higher Education, 9(4, Summer), 1-7.

APPENDIX A
CORRESPONDENCE

Illinois State University

Department of Educational Administration
and Foundations

April 28, 1994

Dr. Nancy D. Evans
Heartland Community College
1226 Towanda Avenue
Bloomington, IL 61701

Dear Dr. Evans:

I am currently a student at Illinois State University in the doctoral program in the Department of Educational Administration and Foundations. I am working on my doctoral dissertation. At this stage, I need to work on my doctoral dissertation proposal.

I am interested in strategic planning, and my dissertation topic is "Strategic Planning in Higher Education: A Study of Application in Selected Private Colleges and Universities in Thailand" which is similar to what you did in 1987. It is well understood that strategic planning was especially popular in the 1980s. I am personally convinced that strategic planning as a discipline and as a tool has an important role to play in organization management. With this conviction, I decide to work on strategic planning for my doctoral dissertation. And since I am an administrator in a private university in Bangkok, Thailand, then my sample includes selected private colleges and universities in Thailand.

I found out that the instrument you used in your study would be valuable to my purpose. I ask for your permission to allow me to use an adaptation of your survey instrument in my questionnaire. Dr. John McCarthy and Dr. Edward R. Hines have consented to my dissertation topic and they provided me with your address.

Your permission will assist me greatly in my dissertation. If you need any further detail concerning the use of your instrument or anything related to it, do not hesitate to contact me. I will be most willing to send you a reply. Thank you for your assistance. I look forward to getting your permission soon.

Sincerely,

Bancha Saenghiran
Department of Educational Administration
and Foundations

Normal-Bloomington, Illinois
Phone: 309/438-5422

331 DeGarmo Hall
Normal, Illinois 61761-6901

Illinois State University

Department of Educational Administration
and Foundations

June 15, 1994

The President
&institution&
&address&
&location&

Dear &salut& &last&:

May I take this opportunity to introduce myself. I am Bro. Bancha Saenghiran, a doctoral candidate, Department of Educational Administration and Foundations, Illinois State University. Currently, I am working toward my doctoral dissertation on "Strategic Planning in Higher Education: A Study of Application in Selected Private Colleges and Universities in Bangkok, Thailand."

At this stage of my academic work, I am conducting a survey to gather data from the sampling group. The purpose of my survey is to determine the extent to which private colleges and universities in Thailand are practicing strategic planning as perceived by administrators and full-time faculty members. Since the administrators and faculty of Assumption University have been selected to share perceptions about planning practices, I would like to obtain your permission on the following:

1. To have half-an-hour to one-hour interview with you, as the president of the institution, to share with you on planning process at your institution.
2. To obtain your permission to conduct a survey with administrators and faculty. It would be most convenient, if you will assign one of your staff acting as coordinator to facilitate the distribution and collection of my questionnaires and for the follow-up if need be.

You may be assured of confidentiality of individual responses. If you need further clarification, please contact me at (02) 300-4543. I truly appreciate your time and effort in assisting me to complete the survey.

Sincerely,

Bancha Saenghiran
Doctoral Candidate
Department of Educational
Administration and Foundations

Edward R. Hines, Ph.D.
Professor of Education

APPENDIX B
COVER LETTER

Illinois State University
Department of Educational Administration
and Foundations

June 30, 1994

Dear Faculty:

Allow me first to introduce myself. I am Bro. Bancha Saenghiran, a doctoral candidate, Department of Educational Administration and Foundations, Illinois State University. I am conducting a study to determine the perceptions of administrators and faculty concerning the level of institutional involvement in strategic planning.

Enclosed is a questionnaire designed to complete the study. Your opinions are very much needed. Just mark the appropriate response for each item and return the questionnaire to Mr. &first& &last name&, the coordinator designated by your president for this project. It will take you about 20 minutes to complete the survey. Under no circumstances will your name or the name of your institution be released to anyone. Your name will be held totally confidential.

I hope to complete the study by November 30th. Your participation will help me a great deal in my study and in the promotion of a scholarly research in the study of higher education.

Thank you for your cooperation.

Sincerely,

Bancha Saenghiran
Doctoral Candidate

APPENDIX C
INTERVIEW INSTRUMENT

INTERVIEW INSTRUMENT

The researcher spent 45-60 minutes interviewing the president of each selected institution to determine the extent to which formal strategic planning is undertaken and the participants involved in the planning process.

The questions used were as follows:

For the past 2-3 years, what have you done in terms of formal planning for your institution?

Institutional Analysis.

1. Have you planned for faculty and staff development and made know your plan to all concerned in the institution?
—Did you plan alone or was a committee used?
2. Have you planned for the facilities to be used in the institution?
—Is there a person or a unit of work responsible for planning in the acquisition of these facilities?
—How far would you be able to follow the plan?
State some of the problems or difficulties faced?
3. Have you studied the financial trends through revenue and expense analysis and planned accordingly?
—Who assisted you in the analysis and planning?
—What are the problems and obstacles that you have faced?
4. Is there any study on teaching and learning methods or on experimental research?
—Who is responsible?
—Do you make known the studies or research to all the faculty members, and how?
—Do you make use of the result of this study or research in planning?

5. In the evaluation of the teaching performance of the faculty members, do you make known and discuss the results with them?
—Are there follow-up stages?
6. Have you studied or assigned someone to study academic achievement of the students?
—How do you evaluate and in what areas?
—Do you make use of the result obtained in your planning?
7. Have you made studies or put someone in charge on manpower planning of the institution?
—Is there a study on the rate of turnover of the personnel?
—What is the average age of the teaching staff?
—How many applied for the teaching job each year?
8. Have you planned for budgeting of the institution?
—Who is responsible for the task?
—How far could you follow the plan?
—What are the obstacles you have faced?

Formulation of Mission, Goals, and Objectives

1. Do you have formal mission, goals, and objectives put down in writing for your institution?
—Who helped in the preparation and consideration?

External Environmental Analysis

1. Do you make any study on changes outside the institution, for example, technological, social, economic, political, and other forces outside the institution but affect the operation of your institution?
—How did you go about it?
—Where did you obtain the data for the development?
—Who is held responsible for the task?
—When did you launch the project?
—What were major obstacles for you to follow according to planning?

2. Is there such study or research done concerning department or subjects that is in great demand in market?
—Who is responsible for it?
3. Do you make study on the number of applications of students in each department to see the trends of increase and decrease, and demographic trends of the students?
—Who is responsible?

Strategy Formulation

1. Have you planned for program development and program elimination?
—How did you go about doing it, and on what basis?
—Where did you get data to support your decisions?
2. What process of selection of academic staff and other personnel do you have?
—Who has the authority to make such decision?
—How far could you follow the plan?
3. To obtain quality students, how and when did you make public relations to attract them?
—Are they effective?
4. Have you planned for the construction?
—What are the data that you have used to support your decision making?
—Who has the final decision to make?

Organization and Systems Design

1. Who designed the structure and other systems of your institution?
—Had they been designed by a single individual or by a committee?
2. In the design of the structure and different sub-systems, on what did you base your judgment?
—Did you consider the outside environments and the internal resources?

3. Did you change or modify the structure systems of the institution sometime?

—When and how did you go about doing it?

—Who performed this job?

Implementation and Evaluation

1. Did you have any system of follow-up, evaluation, corrective measures, and evaluation of end results?
2. Have you studied and had follow-up on the effectiveness in the areas the graduates are working?

—How did you evaluate the effectiveness and in what areas?

3. Did you keep record and make studies on the graduates who employed in the fields they graduated or why they were unemployed?

—How often did you do this?

—Did you find the causes of irregularity?

—Did you make use of the result in your planning?

4. Did you have a follow-up on the academic excellence of other institutions?

—How did you study and what emphasis did you make?

—Did you make use of the result obtained in institution planning?

THANK YOU

APPENDIX D
SURVEY INSTRUMENT

SURVEY INSTRUMENT

Direction for the Respondents

The title of this dissertation is "Strategic Planning in Higher Education: A Study of Application in Selected Private Institutions in Bangkok, Thailand. The main purpose of this questionnaire is to investigate and study your opinion on strategic planning in higher education for the use of administration in higher education institutions. It also provides good opportunity for you to present your views that will be of value to the management in higher education institutions.

The questionnaire is divided into two parts. Part I contains general data of the demography. Part II is the survey of the opinions on the six components that form a model of strategic planning process of higher education institutions.

Before answering the questionnaire, kindly go through these advises, namely,

1. answer all the items,
2. give the answers that are closest to your opinions,
3. do not write your name on the questionnaire.

Your answers are most valuable to educational administration and to this dissertation.

Part I: Professional Characteristics

Please fill in the blanks or mark with "X" in the spaces required.

1. Institution _____
Faculty _____
Department _____
2. Sex: ☐ male ☐ female
3. Age _____ years old.
4. Degree(s) obtained
☐ bachelor's degree in _____
☐ master's degree in _____
☐ doctor's degree in _____
from educational institution ☐ in the country
☐ abroad
5. Your academic rank
☐ professor ☐ associate professor
☐ assistant professor ☐ lecturer
6. Administrative position
☐ vice president ☐ dean
☐ department head ☐ others (please, specify) _____
7. For how long have you been associated with your institution?
_____ years _____ months.
8. Were you in administrative position before?
☐ yes ☐ no. If yes, please specify:

position	years	months
_____	_____	_____
_____	_____	_____
_____	_____	_____
9. For how long have you been in this present administrative position?
_____ years _____ months
10. In comparison to other private colleges and universities, in terms of popularity and social acceptance, how would you rank your institution?

Evaluative Ranking						
1	2	3	4	5	6	7
highest			lowest			

Part II: Institutional Planning Process

Direction

Items 1 through 6 listed below have been identified as components of the institutional planning process. You are to provide two responses for each item. One response is your view of the “Actual Practice” of the level of priority of the item at your institution. The other response is your view of the “Suggested Application” of the level of priority of what should be done at your institution.

On the left, you requested to mark with “X” the response which most closely matches your perception of the level of priority of each item of the planning process (actually being practiced) at your institution. While on the right, it’s your suggested application (what can be done and should be done) at your institution.

The following scale was used:

1 = none, 2 = some, 3 = moderate, 4 = high, and 5 = highest.

2. PLANNING AT THIS INSTITUTION INVOLVES:

LEVEL OF PRIORITY

ACTUAL PRACTICE SUGGESTED APPLICATION

Items	none	some	mode -rate	high	high- est	don't know		none	some	mode -rate	high	high- est
a. mission statement of the institution.....												
b. goals consistent with mission statement												
c. specific objectives consistent with mission, and goals.....												
d. annual data analysis on mission, goals, and objectives.....												
e. long-term goal development as guidelines for continuing yearly operation....												
f. board of trustees' devoted participation in planning.....												
g. participation of the administration in policy making, goals and objectives determination.....												
h. participation of the faculty in policy making, goals and objectives determination.....												
i. others (please, specify).....												

(table continues)

3. PLANNING AT THIS INSTITUTION INVOLVES:

LEVEL OF PRIORITY

ACTUAL PRACTICE

SUGGESTED APPLICATION

Items	none	some	mode -rate	high	high- est	don't know		none	some	mode -rate	high	high- est
a. determining external factors that affect the institution.....												
b. taking advantages of external influences.....												
c. reducing negative impacts presented to the institution by external influences....												
d. studying programs and curricula required by society.....												
e. being responsive to the needs of the labor market (employers).....												
f. getting supports from GOs and NGOs in the country.....												
g. getting supports from GOs and NGOs abroad.....												
h. others (please, specify).....												

(table continues)

4. PLANNING AT THIS INSTITUTION INVOLVES:

LEVEL OF PRIORITY

ACTUAL PRACTICE

SUGGESTED APPLICATION

Items	none	some	mode -rate	high	high- est	don't know		none	some	mode -rate	high	high- est
a. using the institution objectives as operational guidelines.....												
b. eliminating study programs of low quality and of no demand to the institution.....												
c. granting of financial support to important and of high quality projects.....												
d. having effective public relations to increase both the number and the quality of enrollment.....												
e. setting up of new campus at other geographical location.....												
f. studying, analysing, and evaluating of the institution's plans.....												
g. offering continuing education programs for outsiders (staff, businessman, organization executives).....												
h. performing academic evaluation on a yearly basis.....												
i. assessing the achievement of the institution relative to its objectives.....												
j. the faculty's participation in decision making on the aforementioned matters												
k. others (please, specify).....												

5. PLANNING AT THIS INSTITUTION INVOLVES:

LEVEL OF PRIORITY

ACTUAL PRACTICE

SUGGESTED APPLICATION

Items	none	some	mode -rate	high	high- est	don't know		none	some	mode -rate	high	high- est
a. having clear job description for each position.....												
b. giving job assignment corresponding to each individual capability.....												
c. faculty's awareness and knowledge of the plan and its implementation.....												
d. facilitating inter-office communication at all levels.....												
e. giving financial support to the plan implementation.....												
f. consistency in updating management information systems, e.g., alumni information, changes in educational, social and economic areas.....												
g. encouraging the faculty and staff to perform in accordance with the institution plans.....												
h. developing and adjusting long term goals at a regular time each year.....												
i. determining annual budgets at a regular time each year.....												
j. others (please, specify).....												

(table continues)

6. PLANNING AT THIS INSTITUTION INVOLVES:

LEVEL OF PRIORITY

SUGGESTED APPLICATION

ACTUAL PRACTICE

Items	none	some	mode -rate	high	high- est	don't know		none	some	mode -rate	high	high- est
a. distributing work assignment to all working units.....												
b. periodic evaluation of performance based on the plan objectives.....												
c. taking corrective action when planning results do not match planning goals.....												
d. evaluation of institution's achievement based on the standards set in the operational plans.....												
e. adjustment of plans for practical implementation and vice versa.....												
f. making use of the results of curriculum analysis to improve the study programs.....												
g. making of academic research and evaluation to improve teaching methodology.....												
h. study and follow-up of academic progress in other institutions that attain internationally accepted standard.....												
i. others (please, specify).....												

APPENDIX E
DATA TABLES

Table E-1

The Results of Correlation between Each Item and Sub-Scale and Total Score

Institutional Analysis			Strategy Formulation		
Q1	0.44**	0.23**	Q28	0.62**	0.62**
Q2	0.48**	0.39**	Q29	0.37**	0.25**
Q3	0.56**	0.42**	Q30	0.57**	0.52**
Q4	0.46**	0.25**	Q31	0.64**	0.52**
Q5	0.57**	0.43**	Q32	0.54**	0.41**
Q6	0.59**	0.56**	Q33	0.71**	0.64**
Q7	0.58**	0.47**	Q34	0.58**	0.50**
Q8	0.53**	0.43**	Q35	0.48**	0.60**
Q9	0.65**	0.61**	Q36	0.50**	0.58**
Q10	0.36**	0.22**	Q37	0.63**	0.68**
Q11	0.54**	0.43**	Organization and Systems Design		
Q12	0.58**	0.43**	Q38	0.76**	0.66**
Formulation of Mission, Goals, and Objectives			Q39	0.69**	0.63**
Q13	0.66**	0.48**	Q40	0.75**	0.67**
Q14	0.74**	0.57**	Q41	0.73**	0.62**
Q15	0.63**	0.54**	Q42	0.73**	0.63**
Q16	0.70**	0.55**	Q43	0.71**	0.64**
Q17	0.66**	0.57**	Q44	0.76**	0.72**
Q18	0.60**	0.37**	Q45	0.71**	0.62**
Q19	0.65**	0.54**	Q46	0.55**	0.38**
Q20	0.64**	0.63**	Implementation and Evaluation		
External Analysis			Q47	0.69**	0.60**
Q21	0.70**	0.56**	Q48	0.80**	0.62**
Q22	0.73**	0.64**	Q49	0.83**	0.69**
Q23	0.68**	0.46**	Q50	0.76**	0.61**
Q24	0.56**	0.47**	Q51	0.77**	0.65**
Q25	0.64**	0.54**	Q52	0.70**	0.58**
Q26	0.60**	0.36**	Q53	0.71**	0.61**
Q27	0.63**	0.42**	Q54	0.70**	0.65**

Table E-2

Names, Numbers of Students, and Year Founded of Private Colleges and Universities in Thailand

Institution	Number of Students	Year Founded
1. Bangkok University	20,375	1970
2. Dhurakijpundit University	13,778	1970
3. Sripatum University	12,000	1970
4. Institute of Social Technology	2,252	1970
5. The University of the Thai Chamber of Commerce	13,600	1970
6. Assumption University	10,217	1972
7. Siam University	15,336	1973
8. South-East Asia University	4,335	1973
9. Payap University	5,500	1974
10. Saengtham College	252	1976
11. Huachiew Chalermprakiat University	450	1981
12. Christian College	243	1982
13. Vongchavalitkul College	1,660	1984
14. Srisophon College	250	1984
15. Rangsit University	8,974	1985
16. Saint Louis Nursing College	220	1985
17. Phakklang College	989	1986
18. Mission College	187	1986
19. Kasem Bundit University	4,473	1987
20. Bundit Sakon Nakhon College	2,586	1987
21. Yonok College	1,199	1988
22. North Eastern College	2,962	1988
23. Saint John's College	2,058	1989
24. Mahanakorn University	2,952	1990
25. Rama Ayodhaya College	0	1992*
26. UMUC Maryland (Thailand)	0	1993*
27. Rutchapuk College	0	1993*
28. Technology Ratchathani College	0	1993*

*Not in operation at the time of this study

Source: Ministry of University Affairs, 1993

Table E-3

Names, Number of Students, and Year Founded of Private Colleges and Universities in Bangkok, Thailand

Institution	Number of Students	Year Founded
1. Bangkok University	20,375	1970
2. Dhurakijpundit University	13,778	1970
3. Sripatum University	12,000	1970
4. Institute of Social Technology	2,252	1970
5. The University of the Thai Chamber of Commerce	13,600	1970
6. Assumption University	10,217	1972
7. Siam University	15,336	1973
8. South-East Asia University	4,335	1973
9. Huachiew Chalermprakiat University	450	1981
10. Christian College	243	1982
11. Saint Louis College	220	1985
12. Mission College	187	1986
13. Kasem Bundit University	4,473	1987
14. Saint John's College	2,058	1989
15. Mahanakorn University	2,952	1990

Table E-4

The Results of T-Test of Actual Practice between Large and Small Institutions of Each Question (n = 206, n = 130)

	Large <u>Institution</u>		Small <u>Institution</u>		T-value	Sig-t
	Mean	SD	Mean	SD		
<u>Institutional Analysis</u>						
1. financial situation of the institute	3.60	1.52	3.28	1.31	1.96	0.05
2. facilities (instruments, equipment)	4.16	0.77	3.45	0.93	7.28	0.00
3. physical plant (buildings)	4.08	0.89	3.40	0.97	6.66	0.00
4. geographic location and environments	3.99	0.98	3.61	1.04	3.45	0.00
5. number of current enrollment	4.17	0.95	3.25	1.00	8.49	0.00
6. quality of enrollment	3.27	0.96	2.57	0.81	7.16	0.00
7. number of teaching staff in each faculty	3.47	0.92	3.00	0.85	4.75	0.00
8. quality of teaching staff in each faculty	3.79	0.90	3.36	0.86	4.28	0.00
9. efficiency of administration	4.02	1.06	3.05	1.05	8.21	0.00
10. foundations, organizations, and alumni supports	2.68	1.14	2.42	1.27	1.92	0.06
11. curricula responsive to the needs of society and country	4.04	0.88	3.56	0.95	4.69	0.00
12. strength of curricula	3.82	0.95	3.32	0.97	4.62	0.00
<u>Formulation of Mission, Goals, and Objectives</u>						
13. mission statement of the institute	3.87	1.07	3.10	1.01	6.55	0.00
14. goals consistent with mission statement	3.81	1.02	3.00	0.94	7.33	0.00
15. specific objectives consistent with mission and goals	3.72	0.96	2.98	0.92	6.99	0.00
16. annual data analysis on mission, goals, and objectives	3.22	1.16	2.59	0.97	5.38	0.00
17. long-term goal development as guidelines for continuing yearly operation	3.64	1.04	2.68	1.00	8.30	0.00
18. board of trustees' devoted participation in planning	3.13	1.40	2.98	1.13	1.02	0.31
19. participation of the administration in policy making, goal and objective determination	3.90	1.18	3.09	1.09	6.28	0.00
20. participation of the faculty in policy making, goals and objective determination	2.82	1.09	2.32	0.96	4.27	0.00
<u>External Analysis</u>						
21. external factors that affect the institute	3.75	1.04	2.79	0.96	8.50	0.00
22. taking advantages of external influences	3.68	0.94	2.86	1.01	7.55	0.00
23. reducing negative impacts presented to the institute by external influences	3.65	1.10	2.96	1.01	5.80	0.00
24. study programs and curricula required by society	4.13	0.89	3.60	1.02	5.07	0.00
25. needs of the labor market (employers)	4.27	0.80	3.55	1.06	6.61	0.00
26. support from GOs and NGOs in the country	3.10	1.04	2.54	0.92	5.05	0.00
27. support from GOs and NGOs abroad	3.02	1.03	2.21	1.06	6.92	0.00

(table continues)

	Large <u>Institution</u>		Small <u>Institution</u>		T-value	Sig-t
	Mean	SD	Mean	SD		
<u>Strategy Formulation</u>						
28. use the institute objectives as operational guidelines	3.94	0.93	2.89	0.88	10.21	0.00
29. eliminating study programs of low quality and of no relevance to the institute	2.42	1.21	1.85	1.14	4.28	0.00
30. granting financial support to important, and of high quality projects	3.66	1.06	2.88	0.97	6.84	0.00
31. effective public relations to increase both the number and the quality of enrollments	3.57	1.02	2.67	0.87	8.69	0.00
32. setting up of new campus at other geographical location	2.99	1.32	1.51	0.85	12.45	0.00
33. study, analysis and evaluation of the plans of the institute	3.35	1.12	2.31	0.95	9.07	0.00
34. offering continuing education programs for outsiders	3.40	1.02	2.39	0.99	8.89	0.00
35. academic evaluation on a yearly basis	3.32	1.12	2.31	0.91	9.02	0.00
36. evaluation of the achievement of the institute relative to its objectives	3.09	1.17	2.21	0.87	7.92	0.00
37. the faculty's participation in decision making on the aforementioned matters	2.77	0.94	2.10	0.85	6.57	0.00
<u>Organization and Systems Design</u>						
38. clear job description for each position	3.74	1.00	2.85	0.97	8.04	0.00
39. job assignment corresponding to each individual capability	3.56	0.93	2.75	0.91	7.85	0.00
40. faculty's awareness and knowledge of the plan and its implementation	3.27	0.94	2.61	0.88	6.36	0.00
41. facilitating inter-office communication at all levels	3.65	0.93	2.88	0.93	7.40	0.00
42. financial support to the plan implementation	3.62	1.01	2.81	0.93	7.33	0.00
43. consistency in updating management information systems	3.20	1.02	2.31	0.82	8.87	0.00
44. encouragement of the faculty and staff to perform in accordance with the plans of the institute	3.65	0.95	2.82	0.89	7.96	0.00
45. developing and adjusting long term goals at a regular time each year	3.39	1.08	2.56	0.98	7.06	0.00
46. determining annual budgets at a regular time each year	3.30	1.42	2.80	1.18	3.46	0.00
<u>Implementation and Evaluation</u>						
47. work assignment to all the working units	3.86	0.97	3.09	0.98	7.05	0.00
48. periodic evaluation of performance based on the plan objectives	3.33	1.09	2.40	1.03	7.76	0.00
49. taking corrective action when planning results do not match planning goals	3.40	1.03	2.45	1.00	8.37	0.00

(table continues)

	<u>Large Institution</u>		<u>Small Institution</u>		T-value	Sig-t
	Mean	SD	Mean	SD		
50. evaluation of institute's achievement based on the standards set in the operational plans	3.10	1.18	2.35	0.95	6.40	0.00
51. adjustment of plans for practical implementation and vice versa	3.40	1.09	2.51	1.06	7.31	0.00
52. making use of the results of curriculum analysis to improve the study programs	3.30	1.11	2.51	1.04	6.42	0.00
53. making use of academic research and evaluation	2.83	1.08	2.17	0.84	6.39	0.00
54. study and follow-up of academic progress in other institutes that attain internationally accepted standards	3.56	1.06	2.51	1.01	8.97	0.00

Table E-5

The Results of ANOVA on Actual Practice among Three Large Institutions					
Institutional Analysis	Mean	SD	n	F-ratio	Sig-F
L1	46.20	5.12	71	2.00	0.14
L2	44.80	6.96	70		
L3	44.25	5.44	65		
Formulation of Mission, Goals, and Objectives					
L1	28.89	5.52	71	1.64	0.20
L2	27.21	5.46	70		
L3	28.23	5.57	65		
External Analysis					
L1	26.65	4.04	71	3.65	0.03*
L2	25.34	5.06	70		
L3	24.78	3.04	65		
Strategy Formulation					
L1	33.80	4.82	71	3.71	0.03*
L2	31.19	5.69	70		
L3	32.54	6.54	65		
Organization and Systems Design					
L1	32.93	5.42	71	5.17	0.01**
L2	29.60	6.48	70		
L3	31.61	6.63	65		
Implementation and Evaluation					
L1	27.59	5.88	71	2.78	0.06
L2	25.43	5.74	70		
L3	27.40	6.35	65		

* $p < .05$

** $p < .01$

Table E-6

The Results of ANOVA on Actual Practice between Three Small Institutions

Institutional Analysis	Mean	SD	n	F-ratio	Sig-F
S1	38.09	6.08	45	0.65	0.52
S2	39.09	5.66	43		
S3	37.67	6.00	42		
Formulation of Mission, Goals, and Objectives					
S1	22.02	4.96	45	0.65	0.52
S2	23.23	5.09	43		
S3	23.07	6.17	42		
External Analysis					
S1	20.31	5.12	45	1.58	0.21
S2	19.79	4.77	43		
S3	21.50	3.55	42		
Strategy Formulation					
S1	21.62	4.97	45	3.23	0.04*
S2	23.39	6.16	43		
S3	24.50	4.79	42		
Organization and Systems Design					
S1	24.73	6.28	45	1.46	0.24
S2	23.19	5.64	43		
S3	25.31	5.87	42		
Implementation and Evaluation					
S1	19.27	5.76	45	3.17	0.04*
S2	18.88	6.07	43		
S3	21.95	6.54	42		

* $p < .05$

Table E-7

The Results of ANOVA on the Difference between Actual Practice and Suggested Application of Three large Institutions

Institutional Analysis	Mean	SD	n	F-ratio	Sig-F
L1	7.03	5.91	71	2.32	0.10
L2	8.70	6.56	70		
L3	6.45	6.60	65		
Formulation of Mission, Goals, and Objectives					
L1	7.06	7.27	71	2.33	0.10
L2	8.64	6.48	70		
L3	6.21	6.15	65		
External Analysis					
L1	4.27	4.42	71	1.15	0.86
L2	4.51	4.33	70		
L3	4.66	3.92	65		
Strategy Formulation					
L1	7.11	4.85	71	4.89	0.01**
L2	9.53	5.18	70		
L3	6.91	6.36	65		
Organization and Systems Design					
L1	7.35	5.32	71	4.65	0.01**
L2	9.96	6.48	70		
L3	7.08	6.54	65		
Implementation and Evaluation					
L1	8.06	6.51	71	2.31	0.10
L2	9.80	6.42	70		
L3	7.58	6.13	65		

* $p < .05$

** $p < .01$

Table E-8

The Results of ANOVA on the Difference between Actual Practice and Suggested Application of Three Small Institutions

Institutional Analysis	Mean	SD	n	F-ratio	Sig-F
S1	8.13	7.28	45	3.51	0.03*
S2	11.16	7.12	43		
S3	11.81	6.38	42		
Formulation of Mission, Goals, and Objectives					
S1	9.24	6.42	45	0.72	0.49
S2	10.91	5.51	43		
S3	10.12	7.48	42		
External Analysis					
S1	6.16	4.78	45	1.55	0.21
S2	7.93	5.62	43		
S3	6.55	4.29	42		
Strategy Formulation					
S1	12.11	6.49	45	0.73	0.48
S2	13.72	7.82	43		
S3	12.38	5.35	42		
Organization and Systems Design					
S1	10.98	7.43	45	2.20	0.11
S2	14.14	7.75	43		
S3	12.88	6.06	42		
Implementation and Evaluation					
S1	11.29	7.45	45	1.60	0.20
S2	13.60	8.44	43		
S3	10.86	6.97	42		

* $p < .05$

** $p < .01$

Table E-9

The Results of T-Test of Difference Score between Actual and Suggested Practice

Administrators					Faculty			
	n	Mean	SD	T-value	n	Mean	SD	T-value
Institutional Analysis								
Large Inst.	88	6.27	5.75	2.02*	118	7.47	6.39	3.84**
Small Inst.	56	8.73	7.89		74	11.05	6.15	
Formulation of Mission, Goals, and Objectives								
Large Inst.	88	5.84	5.44	3.37**	118	6.56	5.35	4.30**
Small Inst.	56	8.95	5.30		74	10.24	6.39	
External Analysis								
Large Inst.	88	4.28	3.65	3.22**	118	4.14	4.13	3.89**
Small Inst.	56	6.68	4.75		74	6.68	4.76	
Strategy Formulation								
Large Inst.	88	7.12	5.44	5.25**	118	7.19	4.74	5.98**
Small Inst.	56	12.37	6.46		74	12.46	6.58	
Organization and Systems Design								
Large Inst.	88	6.56	5.75	4.45**	118	8.48	5.76	4.90**
Small Inst.	56	11.66	7.25		74	13.03	6.96	
Implementation and Evaluation								
Large Inst.	88	7.90	5.78	2.80**	118	7.99	5.88	4.06**
Small Inst.	56	11.21	7.59		74	11.81	7.04	

* $p < .05$

** $p < .01$

Table E-10

The Results of T-Test between Administrators and Faculty in Large Institutions

		Administrators			Faculty		
	n	Mean	SD	T-value	Mean	SD	T-value
<u>Institutional Analysis</u>							
L1 Faculty	42	45.52	5.56	1.34	52.64	4.14	0.02
Admin.	29	47.17	4.31		52.62	3.95	
L2 Faculty	41	43.71	7.44	1.58	52.73	4.58	0.83
Admin.	29	46.34	6.02		53.69	4.99	
L3 Faculty	35	44.26	5.41	0.02	50.31	5.63	0.03
Admin.	30	44.23	5.56		50.27	6.25	
<u>Formulation of Mission, Goals, and Objectives</u>							
L1 Faculty	42	28.00	5.55	1.65	34.00	3.71	1.11
Admin.	29	30.17	5.31		34.93	3.09	
L2 Faculty	41	27.05	5.48	0.30	34.34	4.42	0.83
Admin.	29	27.45	5.53		35.21	4.07	
L3 Faculty	35	27.57	4.49	1.00	33.94	4.95	0.08
Admin.	30	29.00	6.61		34.03	4.47	
<u>External Analysis</u>							
L1 Faculty	42	26.62	4.14	0.07	30.40	2.76	0.50
Admin.	29	26.69	3.95		30.76	3.17	
L2 Faculty	41	25.83	5.13	0.95	29.54	3.59	0.05
Admin.	29	24.65	4.98		29.59	5.06	
L3 Faculty	35	24.54	2.99	0.69	29.63	4.26	0.68
Admin.	30	25.07	3.12		28.93	3.95	
<u>Strategy Formulation</u>							
L1 Faculty	42	33.38	4.39	0.89	40.21	3.74	0.40
Admin.	29	34.41	5.40		39.83	4.36	
L2 Faculty	41	30.76	5.60	0.75	38.83	5.46	1.94
Admin.	29	31.79	5.87		41.27	4.80	
L3 Faculty	35	31.71	6.56	1.10	38.31	6.59	1.22
Admin.	30	33.50	6.50		40.00	4.52	
<u>Organization and Systems Design</u>							
L1 Faculty	42	31.57	4.63	2.65*	39.17	3.29	1.51
Admin.	29	34.90	5.94		40.38	3.35	
L2 Faculty	41	28.27	5.37	2.09*	38.36	4.72	1.21
Admin.	29	31.48	7.48		39.76	4.76	
L3 Faculty	35	30.43	6.44	1.58	38.08	5.86	0.66
Admin.	30	33.00	6.69		38.93	4.19	
<u>Implementation and Evaluation</u>							
L1 Faculty	42	26.50	5.83	1.92	34.40	3.84	1.23
Admin.	29	29.17	5.69		35.48	3.31	
L2 Faculty	41	25.00	5.59	0.74	33.97	4.75	1.33
Admin.	29	26.03	6.00		35.48	4.56	
L3 Faculty	35	27.23	5.91	0.23	34.17	5.32	1.11
Admin.	30	27.60	6.93		35.53	4.48	

Table E-11

The Results of T-Test between Administrators and Faculty in Medium Institutions

		Actual Practice			Suggested Application		
	n	Mean	SD	T-value	Mean	SD	T-value
<u>Institutional Analysis</u>							
M1 Faculty	39	36.82	6.73	0.74	50.00	5.22	0.41
Admin.	19	38.16	5.96		49.42	4.80	
M2 Faculty	35	39.97	8.22	0.59	47.34	5.97	2.06*
Admin.	23	41.17	6.55		50.74	6.38	
M3 Faculty	31	40.81	5.35	3.38**	51.29	4.95	2.11*
Admin.	20	44.90	3.29		53.65	3.03	
M4 Faculty	36	38.39	5.04	2.78**	49.17	7.17	1.83
Admin.	16	42.44	4.40		52.12	4.38	
<u>Formulation of Mission, Goals, and Objectives</u>							
M1 Faculty	39	21.59	6.06	1.57	33.54	4.77	0.21
Admin.	19	24.42	7.17		33.26	4.52	
M2 Faculty	35	23.20	5.94	0.99	30.48	5.01	2.64**
Admin.	23	24.69	5.10		33.96	4.70	
M3 Faculty	31	25.22	3.37	4.11**	33.64	3.33	2.77**
Admin.	20	28.35	2.06		36.05	2.48	
M4 Faculty	36	24.67	4.41	1.94	31.89	3.34	2.53*
Admin.	16	27.19	4.10		34.69	4.36	
<u>External Analysis</u>							
M1 Faculty	39	20.33	5.01	0.29	29.46	4.45	1.57
Admin.	19	20.74	4.70		27.58	3.92	
M2 Faculty	35	23.66	5.80	0.12	26.83	4.03	2.16*
Admin.	23	23.48	5.37		29.22	4.25	
M3 Faculty	31	21.52	3.40	1.96	29.61	2.67	1.65
Admin.	20	23.25	2.51		30.80	2.24	
M4 Faculty	36	22.05	3.64	2.15*	28.58	3.60	1.20
Admin.	16	24.44	3.79		29.50	1.90	
<u>Strategy Formulation</u>							
M1 Faculty	39	24.61	5.37	0.60	37.23	4.90	0.42
Admin.	19	25.53	5.41		36.63	5.65	
M2 Faculty	35	28.00	8.66	0.36	34.97	6.33	2.60**
Admin.	23	28.78	7.04		39.22	5.70	
M3 Faculty	31	26.00	4.33	1.49	37.52	4.30	1.47
Admin.	20	27.45	2.62		39.15	3.08	
M4 Faculty	36	28.75	4.79	3.23**	37.22	5.13	2.75**
Admin.	16	33.25	4.27		41.37	4.77	

(table continues)

		Actual Practice			Suggested Application		
	n	Mean	SD	T-value	Mean	SD	T-value
<u>Organization and Systems Design</u>							
M1 Faculty	39	23.51	5.47	0.46	37.90	5.28	0.32
Admin.	19	24.26	6.63		38.37	4.98	
M2 Faculty	35	26.97	6.84	0.66	34.80	5.91	2.77**
Admin.	23	28.22	7.29		39.13	5.68	
M3 Faculty	31	26.97	4.37	3.53**	38.71	3.48	1.97
Admin.	20	30.40	2.56		40.60	3.15	
M4 Faculty	36	27.28	3.95	1.85	36.80	5.08	2.04*
Admin.	16	29.50	4.08		39.81	4.52	
<u>Implementation and Evaluation</u>							
M1 Faculty	39	21.41	5.85	0.49	33.26	4.40	0.03
Admin.	19	22.26	7.02		33.21	5.55	
M2 Faculty	35	23.43	6.27	0.76	30.94	5.56	1.94
Admin.	23	22.04	7.43		33.91	5.93	
M3 Faculty	31	22.77	3.29	1.28	33.87	3.63	0.96
Admin.	20	24.10	4.04		34.80	2.97	
M4 Faculty	36	24.14	3.88	2.03*	32.86	4.64	1.80
Admin.	16	26.69	4.81		35.37	4.69	

* $p < .05$

** $p < .01$

Table E-12

The Results of T-Test between Administrators and Faculty in Small Institutions

		n	Actual Practice			Suggested Application		
			Mean	SD	T-value	Mean	SD	T-value
<u>Institutional Analysis</u>								
S1	Faculty	24	36.58	5.76	1.37	49.75	4.69	0.84
	Admin.	18	39.11	6.17		48.28	6.62	
S2	Faculty	27	36.67	5.89	1.98	44.67	5.57	1.65
	Admin.	18	40.22	5.89		47.67	6.52	
S3	Faculty	23	37.43	4.37	2.15*	49.87	4.14	0.43
	Admin.	20	41.00	6.44		50.50	5.45	
<u>Formulation of Mission, Goals, and Objectives</u>								
S1	Faculty	24	20.83	6.36	2.96**	32.42	4.14	0.02
	Admin.	18	26.05	4.53		32.44	4.19	
S2	Faculty	27	21.11	5.08	1.53	29.59	4.79	2.48*
	Admin.	18	23.39	4.58		33.05	4.26	
S3	Faculty	23	22.56	4.48	0.92	33.48	4.47	0.80
	Admin.	20	24.00	5.74		34.60	4.66	
<u>External Analysis</u>								
S1	Faculty	24	21.00	3.87	1.06	27.83	2.30	0.06
	Admin.	18	22.17	3.05		27.78	3.42	
S2	Faculty	27	19.37	4.81	1.53	24.89	5.00	2.62**
	Admin.	18	21.72	5.37		28.50	3.67	
S3	Faculty	23	19.65	4.92	0.20	27.52	4.13	0.02
	Admin.	20	19.95	4.71		27.50	3.87	
<u>Strategy Formulation</u>								
S1	Faculty	24	22.83	3.63	2.81**	35.96	4.26	0.80
	Admin.	18	26.72	5.33		37.05	4.58	
S2	Faculty	27	21.22	4.63	0.66	32.44	5.37	1.59
	Admin.	18	22.22	5.53		35.17	5.97	
S3	Faculty	23	23.35	6.65	0.05	36.56	6.03	0.32
	Admin.	20	23.45	5.72		37.15	5.94	
<u>Organization and Systems Design</u>								
S1	Faculty	24	24.21	6.06	1.42	37.50	4.58	0.69
	Admin.	18	26.78	5.44		38.44	4.10	
S2	Faculty	27	23.26	6.10	1.99	34.48	4.05	1.78
	Admin.	18	26.94	6.04		37.05	5.68	
S3	Faculty	23	22.13	4.48	1.33	37.00	5.61	0.26
	Admin.	20	24.40	6.65		37.45	5.67	
<u>Implementation and Evaluation</u>								
S1	Faculty	24	21.54	6.33	0.47	32.25	4.81	0.09
	Admin.	18	22.50	6.96		32.11	4.59	
S2	Faculty	27	18.33	5.28	1.34	28.78	5.46	2.16*
	Admin.	18	20.67	6.31		32.44	5.78	
S3	Faculty	23	17.78	5.54	1.28	32.35	6.31	0.03
	Admin.	20	20.15	6.55		32.30	5.57	

* $p < .05$ ** $p < .01$