CHAPTER 3

RESEARCH METHODOLOGY

1. INTRODUCTION

According to Kinnear and Taylor (1991) and Churchill (1992) the research design indicates the basic plan that governs the data collection and analysis phase. This chapter contains the methodology that was followed in conducting the research and the rationale behind it.

2. RESEARCH GOALS

According to Marx and Van der Walt (1993), a research project may have one of four basic goals:

1. To describe
2. To discover
3. To establish causes
4. To predict.

This results in three different types of research topics: investigative, descriptive and causal research. For this study, the research survey and the analysis will be used to *describe* executives' current thinking with regards to SCA(s); and the research envisages the *investigation* of the situation with a view to obtaining ideas, new insight, and improved understanding of the topic. This approach is supported by Malhotra (1993), Kinnear and Taylor (1991), and Churchill (1992), who say that investigative studies should be used to arrive at this information. Further purposes listed are the following.

- To formulate or more precisely define a problem
- To develop hypotheses
- To ascertain priorities for further research
- To gain new insight into the research problem

- To explain central concepts and constructs
- As a preliminary to a more structured study of the phenomenon.

2.1 Investigative Research

This study is, as predicted and documented in the work of Tull and Hawkins (1993), characterized in the true nature of an investigative study, by

- a high degree of flexibility,
- the use of secondary data,
- convenience and discretionary sampling,
- small-scale surveys, and
- subjective analysis of results.

Since an investigative study is aimed more at gaining insight than at collecting accurate data that can be replicated, the results will be regarded as tentative and as a starting point for more in-depth future research studies. The insights obtained from this investigative study can be confirmed by conclusive research such as descriptive or causal research (Boyd et al. 1989).

2.2 Descriptive studies

Literature confirms that descriptive studies include a wide variety of research types. This study has focused on the characteristic of a descriptive study, which, according to Churchill (1992), has the primary aim to establish the frequency with which a specific variable appears in a sample, or the relationship between the two variables. According to Malhotra (1993) and Churchill (1992), descriptive studies are used for the following purposes.

- To describe the characteristics of a specific individual, situation, group, organization of object
- To estimate the percentage of units in a specific population that reveal a certain behaviour or attitude
- To make specific predictions.

This study has focused solely on the primary objective, which has been to establish the frequency with which certain concepts or factors are mentioned *and* the priority executives of certain industries place on them.

2.3 Research goals of this study

This research project is an investigative study, supported by empirical research. The basis of the research has been therefore, information gathered in the initial phases of the study, which has been supplemented by empirical evidence.

The project is not based on a definite hypothesis, but has research goals as its launch point. The goals were tested with executives in the marketplace, as well as with a small group of marketing practitioners. To ascertain that the goals are indeed achieved, the questionnaire was first tested with a group of 26 first-year MBA students at the University of Texas. The questionnaire was hand-delivered to 60 Executive MBA students from all over the United States of America. The responses were statistically analyzed to obtain a set of conclusions and to lead to new hypotheses.

Goal 1

To establish the factors/sources of SCA(s) business executives are likely to include in:

1. an unprompted list of contributing SCA factors/sources, and
2. a prompted list of contributing SCA factors/sources.

Goal 2

To establish the frequency with which certain constructs are mentioned and whether certain experience levels or industry experience affects the results.

Goal 3

To establish a priority rating in the current marketplace for the major constructs identified through the secondary research and literature studies.

Goal 4

To establish whether all constructs had been covered by the model and whether any additional factors or concepts are mentioned by the participants which should be incorporated to adapt or expand the resulting SCA Wheel.

3. UNIT OF ANALYSIS

The unit of analysis was highly experienced business executives participating in a MBA programme, with as diverse backgrounds as the normal selection of the MBA selection criteria would result in.

4. RESEARCH METHODOLOGY

This research consisted of two main parts:

1. The secondary search for information and data concerning the topic in popular and academic literature
2. A quantitative analysis of empirical data collected by means of questionnaires.

The study consisted of the following phases:

PHASE 1

A comprehensive literature review addressing:

- Conditions for and Sources of SCA
- Advantages and Benefits of SCA
- Durability of SCA
- Existing models
- Groupings, Domains and Categories used by academics in the field
- Domains, Categories and Groupings used by executives and marketing practitioner.

PHASE 2

Questionnaire development

According to Van der Vyver (1987), a questionnaire has five functions:

- To enable the respondent to understand the question
- To encourage the participant to participate and to convince him/her that all information will be treated as confidential
- To stimulate truthful responses
- To provide clear instructions regarding the expected responses
- To provide the researcher with verifiable and classifiable information.

The greatest of care was taken in the conceptualizing, design, approach and layout of the questionnaire, in an effort to ensure that all five functions set out above would be achieved.

The secondary literature search sought to cover not only the academic literature, but also practitioner journals, which are read by and written for managers. The aim was to reflect in the questionnaire the concepts and language employed by executives. From this pool, a set was selected to cover the domain of the construct as closely as possible. An effort was made to draw first on the current knowledge and experience of the participants by starting with unprompted questions. The first section of the survey was dedicated to this. In it, carefully selected domains and concepts were listed. The selection was checked with two executives and two academics. In the second section, the selected options were then scored on a 10-point rating scale;

0= Not important, *to* 10 = Extremely Important.

The third section, which distilled the concepts even further to 4 main domains, was then developed. This section contains questions with a 5-point assessment scale:

1 = Do not agree at all, *to* 5 = Totally agree

and questions with a 10-point rating scale:

0 = Not important, *to* 10 = Extremely Important.

Next, the questionnaire was pre-tested with 3 academics and 26 students of marketing and management sciences. They were asked to indicate any ambiguities or difficulties with the questionnaire and to provide suggestions for improvement. Based on this feedback, the questionnaire was modified, some items were deleted, other expanded, and others added. The revised instrument was then tested on 3 marketing practitioners for further fine-tuning and the final questionnaire was drawn up. The final product (See Appendix A) was hand-delivered to 60 Executive MBA students at the top MBA programmes in the USA.

The aims of the questionnaire are as follows:

Aim 1

To determine which factors executives regard as playing a role in creating a SCA in business today.

Aim 2

To determine, given the model resulting from the literature studies and the author's experience, which factors do the respondents regard as most prominent/pertinent to their industries.

4.2.1 Design of the questionnaire

A concerted effort was made throughout the design of the questionnaire to be wary of the pitfalls, as pointed out by Van der Vyver (1987) and Leedy (1985). They warn against a questionnaire design that may

- encourage prejudice
- confuse the respondent
- discourage response
- make it difficult to read
- demand too much effort from the respondent, and
- demand too much time from the respondent.

While trying to make the questionnaire easy to read and respond to, question form, wording and question order were carefully selected to keep the survey as interesting and enthusing as possible to promote completion. Questions were ordered in such a manner as to draw to a maximum upon the knowledge and experience of each respondent. Sections of questions were grouped together in order to progress through a logical flow of information.

4.2.1 Face Validity

The face validity of the constructs had to be established; and for this purpose, a short list of items that characterized the constructs was drawn up. The list was submitted to two academics who are considered to be authorities on strategic marketing, and three executives known to the author as marketing practitioners. They rated the items for its consistency with current business terminology. The preliminary questionnaire was pretested with 26 MBA students, varying in management and marketing experience. The elicited perceptions were interpreted and ambiguity and interpretation problems clarified. Based on this feedback, the questionnaire was modified, some of the items were deleted, others were changed and others were added. Finally, the final instrument to be used, was developed.

The final instruments consists of 4 main constructs:

- Finite Resources
- Infinite Resources
- Competencies and Capabilities
- Positioning.

Each construct was represented by between 2 and 7 concepts. The questionnaire consisted of 5 quantitative sections and 1 classification section. It covered 4 pages and took no more than 10 minutes to complete.

Section A tested unprompted responses and top-of-mind perception concerning the sources of SCA. Sections B and C focused on prompted factors as well as the rating of them. Sections D and E tested the validity of the constructs and the priority respondents placec on them as representing sources of SCA.

4.3 PHASE 3

Distribution of the questionnaire and statistical analysis

The questionnaire was distributed to 60 Executive MBA students at the University of Texas, with the assistance of the faculty of the Red McCombs School of Business. Questionnaires were completed at the end of a group session and handed back to the responsible faculty member.

The data analysis involved the following:

- Capturing all responses, including more than 200 different items of unprompted concepts
- Grouping unprompted concepts under constructs determined by the author and represented in Section C of the questionnaire
- Redefining constructs to form more than the defined and distilled 4 constructs, but fewer than the original 20 included in section C
- Descriptive statistics (tables and averages)
- Evaluation of the SCA model, comparing the following:
  1. Level of management experience versus the priority rating of the measured concepts
  2. The effect of industry experience on the perception of the respondents and the related priority rating of the factors and concepts
  3. Relative importance of the listed options as reflected in the averages, medians and standard between promoted and unprompted responses.

5. RESEARCH ANALYSIS

The questionnaire was set against the requirement to apply certain measuring techniques to analyze the data. The author considered both the validity and reliability of the study and its results were considered as vital. Since these two aspects are related (Kervin 1992), all effort was made to ensure that format, methodology, processes and procedures would not detract from the validity and reliability of the study and the results. According to Kerlinger (1986), if there is no knowledge of the validity and reliability of the data, the results and the conclusions drawn obviously have no credibility either. Since this study is based on perceptions and preferences, personal experience and motivations, measurement can become very complicated. Typical problems pointed out by Green, Tull and Albaum (1988), were encountered when these questions were asked:

- Do the scales measure what they were intended to measure?

- Do the responses of the respondents remain stable over time?
- Are respondents' responses consistent over a variety of scale procedures intended to measure the same characteristic used and are they consistent in their allocation of points over the scales?

Readers will note that the measurement scales were clearly indicated on the questionnaire and that *rules* were carefully explained to the respondents. Learning from experience with test groups and interviews, the researcher repeated some rules using different types of explanations to ensure common understanding between the researcher and all respondents. Numbers were used in all cases to measure the object, event and rule. (Kerlinger 1986).

5.1 DESCRIPTIVE STATISTICS

The different sections and variables represented in the questionnaire are discussed and summarized individually. This involves the calculation of averages, standard deviations, sum totals, minimum and maximum values for the variables in the questionnaire. Frequency tables are compiled for the categorical variables in the questionnaire. The averages and frequency tables are considered to be the most important of the statistics discussed in this section. Although not all information is discussed, an attempt is made to focus on the core values and the core determinants as reflected by the responses of the participants.

Demographics of the respondents as reflected in the classification section, are used to reflect the relative impact of experience in (a) managerial positions and (b) marketing, as well as overall business experience on the perceptions, opinions and motivators of the respondents. They include:

- Total number of years work experience
- Number of years experience in management
- Number of years experience in marketing or as a marketing practitioner
- Industry most experience gained.

Since all 57 responses analyzed were received from a reasonably homogenous group of Executive MBA students (i.e. currently employed, more than 28 years old and post-graduate students), education level and age will not be not discussed in any detail. Business, marketing and managerial experience are considered influencing variables, and the their effects on the opinion of the respondents will, therefore, be discussed in some detail. A total of 5 female respondents of varying ages, industry experience and managerial experience levels participated in the study. Gender differences are not considered to be of consequence, relative to the importance of experience and expertise, to this study and is, therefore, not included as descriptive statistics anywhere in this study.

6. SUMMARY

The aim of this chapter was to obtain and give clarity concerning the goals and methodology of the research as well as to outline the logic and methodology used, from the point of view of validity and reliability.