SOURCES OF SUSTAINABLE COMPETITIVE ADVANTAGE FOR BUSINESSES OPERATING IN A GLOBAL MARKETPLACE

by

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SYNOPSIS

Managers and marketing practitioners are spending more time and limited resources on finding new ways to acquire and retain customers. This study pursues the goal, to assist marketing practitioners, with a model of constructs and concepts, encapsulating all relevant sources of sustainable competitive advantages (SCA(s)) they should consider when conceptualizing, planning and implementing strategies to achieve a sustainable competitive edge for his/her SBU or firm in the global marketplace.

Qualitative research is employed to establish the terminology currently in use, as well as to expand the list of possible sources of SCA, already identified by academics and practitioners in a wide variety of business disciplines.

Quantitative research is employed to rate and rank these sources and to categorize all sources in 4 domains.

The resulting SCA model is a circular model with 4 domains and 20 sources of SCA(s). The 4 domains are:
Preferred Positioning; Superior Finite Resources; Superior Infinite Resources and Superior Competencies and Capabilities.
According to the quantitative research results, the majority of respondents rate all four domains as able and important contributors in planning for a SCA for a SBU or firm. The 20 sources of SCA receive very different ratings and rankings from respondents in different subgroups of the sample group. Marketing and business experience of the respondents, as well as the industry which the respondents consider to be their learning ground, has a noticeable impact on the evaluation of the sources.

SINOPSIS

Besigheidsbestuurders en bemarkingspesialiste spandeer deesdae meer tyd en beperkte hupbronne aan die verkryging van nuwe maniere om kliënte te kry en te behou. Hierdie navorsingstudie poog om besige bemarkingspesialiste te ondersteun, deur middel van'n model wat die moontlike bronne van instandhoubare markvoordeel, uiteensit. Hierdie model poog om alle relevante bronne wat die bestuurder moet oorweeg in die strategiese beplanning vir instandhoubare markvoordeel, vir sy/haar besigheidseenheid of firma, uiteen te sit.

Kwalitatiewe navorsing is gebruik om die terminologie wat huidiglik in die markplek gebruik word, en reeds deur akademici en praktisyns in 'n verkeidenheid van besigheidsdissiplines geïdentifiseer is, te bepaal. Verder is dit gebruik om die lys van bronne sover moontlik uit te brei.

Kwantiatiewe navorsing word gebruik om die bronne te rangskik en in 4 kategorië te verdeel.

Die model wat sodoende ontwikkel is, is 'n sirkel-model wat uit 4 kategorië en 20 bronne bestaan. Hierdie 4 kategorië is:
"*Preferred Positioning; Superior Finite Resources; Superior Infinite Resources and Superior Competencies and Capabilities.*" Volgens die kwantitatiewe navorsingsresultate, word al vier hierdie katagorië van bronne, deur die oorgrote meerderheid van die respondente, as uiters belangrik beskou. Die 20 bronne, word egter dramaties verskillend bejeën deur verskillend respondent-subgroepe. Bemarkings- en bestuurservaring, sowel as die industrie waarin die respondent ondervinding opgebou het, speel 'n waarneembare rol in die evaluering van die bronne.

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CHAPTER 1

THE MARKETING PRACTITIONER'S PERSPECTIVE

1. EXECUTIVE SUMMARY

Managers are spending more time and other limited resources in finding new ways to keep demanding customers happy and loyal, in order to achieve superior financial and market performance. Most managers agree that past successes are no guarantee for future success. Past successes actually often lead to *hubris,* which may even impede businesses' abilities to regenerate or maintain a relatively good competitive position in an industry or market place. Globalization contributes in its own uniquely new way to increase the competitive pressures business will have to deal with. Seen against this backdrop, marketing practitioners will need to find new ways of contributing to the sustainable competitive advantages businesses may have or seek.

An abundance of literature with regard to Sustainable Competitive Advantage (SCA) exists within a broader model of business capabilities and success determinants. The purpose of this study is to produce an at-a-glance model of constructs and concepts, based on a sound literature review. Marketing practitioners could employ this SCA model to assist in the development of a SCA strategy for the business ventures they are involved in.

An additional aim of the study is to produce, through the use of individual questionnaires and personal interviews, some sense as to the way in which managers would rate the importance of the generated concepts, comprising the different SCA constructs. Managers will be selected from a range of functions and nationalities, and they will be pre-selected of the basis of their businesses' current financial and market place performances. Academia and practitioners will be approached to fine-tune the questionnaire and to confirm the relevance and validity of the questionnaire.
The resulting model will be enhanced by a discussion of the relevant data and trends from previous research. Summarized data collected from the questionnaires and personal interviews will be portrayed in the most appropriate format to ensure correct interpretation and comprehensibility.

2. INTRODUCTION

One finds senior management spending more time considering the company's ability to innovate and regenerate successes of the past into the future. Most managers will agree that past successes are no guarantee of future success. This is especially true of marketing campaigns and relative competitive position within an industry. *(Porter1985; Hammel and Prahalad 1994).* Four pertinent questions Gary Hammel and CK Prahalad ask in their book *Competing for the Future,* are:

[1] "How influential is my company in setting new rules of competition within its industry?

[2] Is it more intent on challenging the industry status quo than protecting it?

[3] What percentage of our improvement efforts (quality improvement, cycle time reduction, and improved customer service) focuses on merely catching up to our competitors? AND

[4] What is the balance between hope and anxiety in my company; between confidence in our ability to find and exploit opportunities for growth and new business development and concern about our ability to maintain competitiveness in our traditional businesses; between a sense of opportunity and a sense of vulnerability, both corporate and personal?"

Later in the book, *Competing for the Future,* Hammel and Prahalad suggest that "a company must be capable of fundamentally reconceiving itself, or regenerating its core strategies and of reinventing its industry." In short, it must be able to differentiate itself from its competitors and industry players.

3. BACKGROUND

There is an increasing number of Fortune 100 companies and other global players vanishing from the face of the market place and some top brands seems to be on a roller coaster ride of popularity and profitability (Deloitte Research,1998). Increasingly, we see globally known brands such as Levis, Marks & Spencer, and IBM, having rough times and either recovering at great expense or with difficulty, or vanishing from the minds of consumers and eventually from the market place.

(Sampson, 2000).

It has become normal, and even expected, to see some of the giant global brands decrease in popularity and, therefore, in market share and profitability, only to eventually end up changing places - at the bottom of the popularity ladder - with previously localized or limited (geographically, demographically or i.t.o. niche markets) brands. Some of the top global brands even vanish into oblivion.

Today, businesses throughout the world compete for share of customer and share of wallet, with previously non-traditional or unexpected competitors. With the increasing convergence and consolidation of companies (Deloitte Consulting International Conference on Top 10 Market Trends 2000), traditional competitors have increased in size and/or numbers and service organizations throughout the world are competing for clients with competitors from new industries and new directions.

On the other hand, there seems to be giant global companies (or brands) such as Disney, Coca Cola, Rover, Cartier, Nokia, Sony, Kodak, Gillette and others, who seem to have found a recipe for success. (Saachi & Saachi 1999). In an article by Jeremy Sampson (2000) top brands from the US and UK are compared. These mega-brands have been top brands in their market/industry in 1923 and are currently still rated as the top brand in that industry. Have they perhaps found a recipe towards sustainable fame and riches? With businesses or companies committing an ever increasing number of resources to simply stay in place and to retain their market share or share of customer… "the importance of competitive advantage could hardly by greater." (Porter 1985).

In recent years there has been a renewed focus on global competitiveness and providing superior value and/or unique alternatives to satisfy customers' ever-changing needs. One has only to do an initial literature study to find many studies, books, articles and theses in a diversity of fields, ranging from human resource management, to cost accounting, from strategic management to IT; to find an abundance of opinions - not all equally relevant or useful - on the matter.

Obviously, becoming and remaining competitive in a global environment are determined by a very broad band of processes, systems, capabilities and strategies within the business. This study does not propose in any way that it is the sole role of marketing to provide business with (a) sustainable competitive advantage(s). Rather, the purpose of this research is to explore ways in which marketing can and does contribute to a sustainable competitive edge, as a key result area amongst other business functions and strategic business units. The aim of this study is to focus on marketing implementation, tactics, action plans, processes and systems, rather than on broad corporate strategy, general management, human resources (HR) and financial management. This study is based on the supposition, that marketing does not work in isolation form the other business capabilities and processes (Doyle and Wong 1998).

Gaining positions of competitive strength has become more important in this increasingly competitive global environment (Van der Merwe and Chadwick 1991). Since globalization is a reality and not merely a threat - or an opportunity - of the future, this study will not limit its scope to studying competitive advantage for businesses within a certain geographically, politically, fiscally, legally limited environment, but investigated the contribution of marketing within a broader bundle of determinants of global competitiveness.

4. PROBLEM STATEMENT

A large body of literature addresses different strategies and sources of competitive advantage. In order to find a comprehensive model of all the strategies, techniques, tactics, mixes and marketing action plans, managers must work through volumes of papers, reports, magazines and articles, from the earliest literature by Alderson in 1937, to the present. Not only is the body of literature large, but it is also highly diverse in nature.

It is therefore the aim of this study to produce a SCA model, presenting a comprehensive summary of the literature in a graphical, at-a-glance format. Though LISREL or other advanced multivariate tests will not be used, qualitative and quantitative research methodologies will be used to test marketing practitioners' views on the validity, contribution and priority of the concepts and constructs developed.

5 THE RESEARCH

5.1 RESEARCH OBJECTIVES

The preparatory work commenced with a literature study that focused on previous investigations, methodologies and fields relevant to this study. This search covered academic literature, marketing journals and business publications related to the topic.

Objective 1:

The purpose was to **identify a large pool of relevant concepts** in order to build out the constructs and dimensions of SCA, and to confine the study to specific, measurable, achievable limits that could be completed within a reasonable time-frame.

Objective 2:

Literature studies were aimed at providing a basic structure of the theoretical marketing aspects against which practical marketing actions, tactics and interventions could be designed and measured. This part of the study was qualitative and will provide the explanatory background of a *graphical SCA model.* The graphical model aimedo group concepts together in logical, appropriate dimensions for practitioners to use to audit their strengths and weaknesses.

Objective 3:

During the third phase of the study a survey was mailed or personally handed to a sample of senior managers, or executive MBA students with at least 10 years experience. Care was taken to identify the experience level and the industry in which the respondents have had the most experience. Respondents were specifically instructed to make judgements or assessments based upon the industry they have had most experience. The objective was to determine the priority ranking or weighting of the different dimensions and constructs of the SCA model. Besides prioritizing the constructs encapsulated in the model, the research findings was intended be used to test the validity and the completeness of the model. At the outset, participants were asked offer the top-of-mind factors that they consider contribute to SCA in an unprompted format. This was followed by a prompted section.

5.2 RESEARCH DESIGN

This research study has a ***two-stage*** design. In stage one the largest proportion of time and other limited resources were spent on an exploratory study. The result of the initial study was a hypothesis, documented in the form of a SCA model, or strategies, tactics and principles which, when implemented, wouldl provide the marketing practitioner with clear dimensions to test their marketing strategies and tactics against when contributing to the SCA for their firm.

The exploratory study focused mainly on secondary literature and published documents. This was supported by telephonic and personal interviews as an **experience survey**. In this case marginal and peripheral individuals (i.e. non-marketers) were included as respondents in the experience survey.

In stage two, the researcher did, after being satisfied that the major concepts and dimensions of SCA had been covered, a short, formal, quantitative study to explore the priority current practitioners place on the aspects/dimensions encapsulated in the model.

In the case of the formal, quantitative research, the following two methods of data collection were used:

1. **Self-administered reports** were handed to a random sample of executive MBA students at a top business school in the USA (at least 50 returned reports to be analyzed);
2. **Interviews** were conducted with marketing practitioners and other SBU managers in participating companies. [Interviews with academics are held to review their view on the same issues.]

5.2.1 Sample Design

A stratified sample, which includes financial, hospitality, and consulting, or service companies and a random sample of well-known global brands with

reference to product companies, both with a certain degree of existing superior financial and market performance, were used. These were attained through the standard selection process of the business school and the qualifying criteria used by the selected business school. The class was selected upon (a) the average level of business and strategic management experience of the group, and (b) the accessibility and class size of the students. This approach was selected for its simplicity and flexibility. A challenge (and perhaps limitation) of the study was the selection of the universe and the creation of an operational definition of SCA for the purposes of research and analysis.

The definition on which the selection was based was purely theoretical and was based on literature studies. (See paragraph 5.2.3.) The definition also formed the basis of the questionnaires that were sent out in search of quantifiable information.

The researcher understood that to obtain a representative set of companies across the globe, would be very difficult and costly. Ideally the sample should have been drawn from *Fortune Global 500, The Times Top 100* and the 39 companies regarded as financially successful, global institutions *(Pathways to Global Success*) completed by Deloitte Touch Tohmatsu (2000)). Difficulties of accessibility and of cost prevented such an exercise; and since the objective had always been a generic SCA model, the resulting survey may not have statistical ground, but nevertheless gives and indication of marketing practice by services and product companies. This study therefore used the alternative strategy, that is, finding respondents who would likely qualify, but were more accessible and more concentrated in a geographical area. The researcher selected this option, based on the fact that it would give and indication of marketing practice by services and product companies or FMCG companies.

In summary, an unweighted model of marketing principles, philosophies, strategies, tactics and action plans supposedly responsible for the creation of a SCA was developed, based on secondary research. Primary research in the form of questionnaires and interviews were used to test marketing

practitioners' support for the suggested concepts and constructs, and some level of prioritization was done.

5.2.2 Questionnaire development and design

A large pool of constructs and concepts were gathered from literature reviews. These were expanded/tested through personal interviews and in workshop situations. A questionnaire was designed, which was pre-tested with 8 managers in a range of management functions. The questionnaires were finalized and tested with marketing academics.

5.4 CONTROL OF VARIABLES

The researcher could not and did not attempt to control or manipulate the variables involved in this investigation; therefore, an ex post facto design was used to report what had been and was happening at the time, in terms of SCA in firms. The researcher attempted to hold factors constant by judicious selection of respondents and by sound statistical manipulation of findings.

5.5 NATURE AND FORM OF RESULTS

Results are presented in the form of a graphical model, supported and enhanced by a discussion of the relevant data and trends from previous research, with comments on particular methods and designs that were valuable or invaluable, biased or un-biased.

Summarized data collected from the questionnaires and personal interviews are portrayed in the most appropriate format to ensure correct interpretation and comprehensibility. These include tables, pie charts, bar charts and linear graphs. In all cases the sample size and response rate will be given to reflect the validity (or lack thereof) of the data.

5.6 LIMITATIONS OF THE STUDY

In the initial phases, the study is solely based on secondary data. This type of research has obvious limitations.

Firstly, most sources are two years or more old and circumstances, customer behavior and factors such as the political, fiscal, legal, economic and technological environments could have, or have in fact changed substantially. That is, enough so that the printed literature may have become outdated and, in extreme cases, even redundant.

Secondly, because of the nature and scope of the study, as well as the initial focus on marketing literature, a certain level of bias was anticipated. A study of broader business literature and a wider field of journals in the field of marketing and business management would have been ideal. Unfortunately such a study would have consumed too many limited resources, given the mandate and level of this study.

Thirdly, access to requested research material was sometimes limited and in some cases denied, because of the cost and time limitations of ordering the material. Although critical external data sources were in all cases accessed, not all sources of lesser (perceived) importance could be obtained.

Finally, in order to assess the appropriateness and credibility of the secondary information sources used, a number of recognized academics and theorists in the field are cross-referenced. A comprehensive review is done to ensure that critical sources are scrutinized, analyzed and incorporated into the study.

6 LITERATURE REVIEW

6.1 POSITIONING

This section of the study demonstrates how past and current literature applies to the proposed study. Literature review included academic papers, business books on the topic and related concerns, articles from journals, popular magazines and practitioner

journals aimed at and read by business managers. This literature review was used to identify concepts and constructs, possible shortcomings, stumbling blocks and landmines on the road to the ultimate goal of a prioritized SCA model.

6.2 OPERATIONAL VOCABULARY & EXPLANATIONS

An advantage, of whatever nature, is of obvious importance for a business interested in prolonged or long-term success. The Webster Dictionary defines *sustain* as "to keep or to prolong". It defines *competitive* as "related to or based on competition" and *advantage* as " a superior position or condition resulting from some course of action".

Although not a formal definition, the perspective of this study supports the view that a competitive advantage (CA) is the possession of a unique characteristic, or set of characteristics, that permit one firm to differentiate itself from competitors in the eyes of the prospective consumer or existing customer, in order to be the provider of choice. [1]) This perspective formed the basis for the initial literature review in order to establish a formal definition of SCA.

6.2.1 Formal SCA Definitions

A large body of literature has been produced, which addresses the context and content of competitive advantage (CA) as well as its sources and different types of strategies that may be used to achieve it. Alderson (1965) was one of the first to recognize the need for a firm to possess unique advantages in order to progress - or even survive - in a highly competitive market place. Many years later, Hall (1980), Henderson (1983), Hammel and Prahalad (1989) and Dickson (1992) actively pursued the creation of new, unique, advantages that can place firms one step ahead of the pack of competitors. The concept of a *sustainable* advantage (SCA) was proposed by Day in 1984, when he suggested strategies to "sustain the competitive advantage". The actual term

[1] Competition, then, consists of the constant struggle among firms for a comparative advantage in resource that will yield a marketplace position of competitive advantage, and thereby, superior financial performance" (Hung and Moran 1995).

"*sustainable competitive advantage*" became prominent in marketing literature, when Porter (1985) discussed some strategies firms could employ - low cost or differentiation - to achieve SCA. A formal definition can be found in the study by Barney (1991):

"A firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors AND when these other firms are unable to duplicate the benefits of this strategy" (Italics in original, underline added).

An article published by the Academy of Marketing and Science Review , Hoffman (1993) suggests the following formal conceptual definition:

"***An SCA is the prolonged benefit of implementing some unique value-creating strategy not simultaneously being implemented by any current or potential competitors along with the inability to duplicate the benefits of this strategy."*** (Normal typeface in original).

This definition highlights the importance of the **benefit of implementation**, which in the mind of the author, makes it superior to the aforementioned definition, which focuses merely on the implementation of a predetermined strategy by a firm of SBU.

A more recent study by John Fahy (1996) focuses on the role of resources in the creation and sustaining of a CA in international services. An important perspective highlighted by this study is that the company's competitiveness will be enhanced when resources and capabilities are "valuable, rare, immobile and cannot be easily imitated". (See 6.2.2. SCA Concepts and Sources, for further details.)

In the article, "The Comparative Advantage Theory of Competition" by Hunt and Morgan (1995), nine premises of competition in a market-based economy are set out. A concept discussed here, which affects the definition of this

study, is a clear statement that the firm's primary objective is superior financial performance. This primary objective should enable secondary objectives such as contributing to social causes, etc. An expansion of this concept on the relationship between marketing and business performance, can be found in the study by Doyle and Wong (1998). According to Doyle and Wong, successful companies will seek to balance financial and market performance. In the aforementioned study, financial performance is measured by: return on capital, market share, sales growth and the managers' assessments of overall performance. The research done during this study, clearly supports the hypothesis that high performance/successful companies seek sound financial performance, whilst simultaneously enhancing its market place positioning over both the short and long term.

Based on the work by Barney, the enhancement offered by Fahy, the definition suggested by Hoffman (1993), and the enhancements from Doyle, the **operational definition** offered for the purposes of this study is:

A sustainable competitive advantage (SCA) is the sustained superior[2)] financial and market performance a business will achieve from conceiving and implementing a value-creating strategy; not simultaneously being implemented by any current or potential competitors. This strategy and supporting capabilities must be valuable, rare, immobile and not easily imitated, duplicated, acquired or substituted.

Following Hoffmann's (1993) discussion, an external focus - that is a focus on competitors - will allow firms to "recognize and/or create *unique* resources". A further addition to this external focus is offered - that is a focus on customers - which will allow firms to create real value that will offer customer satisfaction and excitement. "The advantage is sustained (prolonged) as long

[2] This study accepts the interpretation by Hunt and Moran (1995) of the word *superior* in that it implies that the firm seeks a level of financial and market performance that exceeds that of its referents. It is agreed that firms do not always maximize profits. Both because of the lack of information and because they believe employing any manes to achieve maximum profit, e.g. cheating, is ethically and morally unacceptable.

as the unique strategy provides added value to customers, and as long as competitors cannot find a way to duplicate it."

An elaboration on this inability to duplicate the value-added strategy, refers back to the groundbreaking article by Theodore Levitt (Marketing Myopia,1964), plus the growing trend of commoditization of products and services. Where the author disagrees with this last quote from Hoffmann's work, is that it is almost certain that winning strategies will be imitated or duplicated at some point or in some way.

In order to sustain the advantage the firm has gained through the superiority of its resources, skills and strategies, the management will have to constantly monitor competitor activities and constantly refresh, renew and innovate unique points of differentiation *plus* find new ways to satisfy the ever-changing needs of prospects and customers.

The focus is, therefore, rather on the difficulty with which strategy and advantages are duplicable than the total lack of ability to duplicate, keeping in mind that if *you* could achieve it, someone else can achieve it, too! Also, the willingness and conscious effort to change marketing strategy on an ongoing basis could be seen as a competitive strategy in itself.

6.2.2 SCA Concepts or Sources

Although consideration is given to articles and publications before 1984, our limited resources are focused on opinions, surveys and studies produced since the concept of SCA was introduced by Day.

Day and Wensley (1988) focused on two specific categories of SCA sources: "superior skills" and "superior resources". These are respectively defined as: "the distinctive capabilities of personnel that set them apart form the personnel of competing firms" and "the more tangible requirements for advantage that enable a firm to exercise its capabilities".

6.2.2.1 Superior skills and capabilities

With the search for talent taking on new levels of so-called staff-poaching and the increase in demand for talented employees (Deloitte Research, 2000), the ability to retain superior skills will be under stress and probably increase in importance.

The increased focus on relationship marketing (Srivastava et al. 1998, Treacy and Wiersema 1995, Narver and Slater 1990, Hunt and Morgan 1996, Kohli and Jaworski 1996) and the resulting intimization of business-customer relationships will place greater demands on highly qualified and truly customer-orientated employees at all levels, thus placing additional priority on skilled (either naturally or trained) staff.

There is an obvious link between the distinctive capabilities of personnel and the human resource management discipline of businesses. A large body of literature was found on the role of human resource management (HRM) in gaining a superior position in the market place has emerged, since HR management and practices are "playing an increasingly vital role in the success of multinational enterprises". (Florkowski and Schuler, 1994 Terpstra 1994). In his article "*HRM: A key to competitiveness*", David Terpstra (1994) refers to seven HRM practices to help enhance individual and workforce performance and productivity:
[1] recruitment studies, [2] validation studies, [3] cognitive aptitude and ability tests, [4] biographical information banks, [5] structured interviews, [6] goal setting, and[7] rigorous evaluations of development activities.

6.2.2.2 Resources

The concept of SCA through superior resources can be sub-divided into many multi-polar and delineating concepts. For example, Hunt and Morgan (1995) contributed to the concept by proposing that "potential resources can be most usefully categorized as financial, physical, legal, human, organizational, informational and relational". The London School

of Business suggests two areas of resources: finite and infinite resources. An example of finite resources would be time and money, whilst infinite resources could be creativity and enthusiasm.

Resources are also considered valuable or non-contributing. Aaker (1989), and Coyne (1985), define "value" in terms of meeting key buyer needs. Srivastava et al. (1998) divide resources into two types: relational and intellectual. "Relational market-based assets are those that reflect bonds between a firm and its customers and/or channel members." Examples are respectively brand equity and the detailed knowledge of customer-centric employees. (Hoffmann,1993)

For the purposes of this study, resources will be divided into 3 conceptual categories:

1. (Superior)Finite resources, (including human resources and their competence)
2. (Superior) Infinite resources, and
3. (Preferred) Positioning.

Preferred positioning refers to the ability of firms to own a place in the mind of their prospects and customers in order to be the preferred provider of their (service or product) offering.

6.2.2.3 Preferred Positioning

An ever-increasing body of literature can be found concerning the building of brand equity and clear brand positioning of organizations. This study therefore hypothesizes that this aspect of the marketing strategy of firms will be of increasing importance and, therefore, proposes it as a third concept. (This assumption is tested in phase 2 of the research design, that is the quantitative research survey amongst SBU managers.) Therefore, although originally part of the relational intangible resources category of SCA sources (Srivastava et.al. 1998), that is, brand positioning and customer relationships, it will be treated as a separate concept under the construct of SCA.

6.2.3 Conditions for SCA to exist

Gaining positions of competitive advantage become more important in an increasingly globally complex and volatile marketplace - and market space (Van der Merwe and Chadwick 1991). Not all resources possess the inherent ability contribute to a SCA (Wenerfelt 1989). Sets of conditions are proposed by Barney (1991) and Peteraf (1993), that will assist managers to identify resources' ability to improve the organization's effectiveness and efficiency. Barney (1991) contributed to the area of resource based SCA by proposing four attributes for resources to possess to potential of contributing to the SCA:

1. rareness,
2. value,
3. inability to be imitated and
4. inability to be substituted.

Peteraf (1993) suggests four conditions that underlie the inherent ability of resources to contribute to SCA:

"Ex-poste limits to competition (incl. imperfect imitability and imperfect substitutability), imperfect mobility, and ex-ante limits in competition.

In their book, *Competing for the Future*, Gary Hammel and CK Prahalad (1994) infers that the adaptiveness of a company's top management structure (p15) - i.e. their ability to regenerate strategy. " It is entirely possible for a company to downsize and reengineer without ever confronting the need to regenerate its core strategy, without ever being forced to rethink the boundaries of its industry, without ever having to imagine what customers might want in ten years' time, and without ever having to fundamentally redement its 'served market'. Yet, without such a fundamental reassessment, a company will be overtaken on the road to the future." We therefore support the view expressed by Hoffmann (2000) that management orientation towards change, and their ability to combine resources in a unique manner, focussing on collectively learning how to coordinate all efforts in order to facilitate growth in specific core competencies is imperative to SCA.

7 BENEFITS OF THE STUDY

The study will provide marketing practitioners with fresh insights into theoretical models and principles developed by a number of various theorists, academics and business writers in the field.

A further benefit and deliverable of the study is a comprehensive graphical model of critical success factors in the creation and maintenance of a competitive advantage for businesses operating in a global market.

Practitioners from diverse industries will be able to see the relevance of certain marketing strategies and tactics to their particular industry and the level of priority (interviewed and surveyed) practitioners attach to these strategies and tactics. The information encapsulated in the study should provide practitioners with links between their concerns about competitive advantages for their firms or business, and the appropriateness of the firm's activities in contributing to good implementation for a favorable competitive position in their industries.

Marketers will be able to do audits of strengths and weaknesses of processes, capabilities, strategies and tactics most associated with or highly ranked by successful businesses. They will be able to compare their practices and plans with high-performing organizations and adapt or change theirs in order to enhance capabilities, resources, and positioning in order to achieve an improved or superior competitive place in their industry or marketplace.

CHAPTER 2

THEORETICAL BASIS AND LITERATURE REVIEW

1. INTRODUCTION

An extensive body of literature focuses on a broad range of issues with regards to competitive advantage. A study of the literature on a sustainable competitive advantage (SCA) for businesses around the world resulted in the discovery that most focuses on two areas in which businesses must look for an SCA: superior resources and superior skills. Since the focus of this study is the role of the *marketing practitioner* in creating and maintaining the SCA of a business, this study will place specific and special focus on an additional area, **preferred or differential positioning**. A further distinction of this study will be broadening the area of skills to **superior competences** and dividing resources into **superior finite** and **superior infinite resources.**

The word ***superior*** may mean different things to different people, but this study will take the standpoint that, as long as the attribute or asset of the business is perceived as superior, in whatever manner or means, by customers and/or stakeholders/constituents of the business, that attribute will contribute to the SCA of the business. In addition, attributes or assets which directly or indirectly contribute to the improved financial performance of the company can be labeled as superior. The word ***superior*** is therefore clearly used in relation to the same or a similar attributes or assets, of any one of the businesses' competitors in the same industry or business, which are competing for the same dollar (rand/franc/mark/yen) of the same consumer.

This study is also of the view that, for different industries and different locations, different attributes or sources of advantage will play a role in the creation of a SCA. Therefore, rather than offering a linear model, of which the shear nature of the module would have forced the writer to place certain contributors at the top or bottom of a list, a circular model is presented. The circular conceptual model also illustrates the changing

or revolving nature of business; that is, the fact that the attribute or issue that led to a business's rise to fame and fortune today, may not do so in the future and visa versa. The model therefore suggests that sustainable competitive advantages can only be achieved through continued reinvestments in new competencies and new finite resources, supported by constant search for and investment in the most suitable market positioning. In the absence of constant monitoring of internal and external market forces, erosion of current competitive advantages or the critical strengthening thereof in the face of competitors' onslaughts, may lead to the long-term stagnation of the business and ultimately to the loss of CA(s) or even the closure of that business.

The circle with it radiating spokes further illustrates the interdependence and interrelation of the SCA issues and shows that the absence of one of the attributes or issues will break the links, and therefore the strength of the SCA Wheel. To reflect the belief of this study that each key source or issue will over time play a different or proportionally more or less important role as a source of or issue in the SCA of a business, each segment, represented by a spoke of the wheel, is of equal distance to the next. The sectors are represented as equal in size so that the size of each segment would not influence readers' perceptions. [Hereafter, resources, skills, competencies and positioning will be called "sources of SCA" or simply "sources".]

2. POTENTIAL CONDITIONS FOR AND SOURCES OF SUSTAINABLE COMPETITIVE ADVANTAGE (SCA)

2.1 CONDITIONS FOR SCA

A number of studies have explored the requirements for and conditions under which businesses will haveSCAs. (Bharadwaj et al. 1993; Barney 1991; Hamel and Prahalad 1991; Coyne 1985). Bharadwaj et al. repeat the four essential requirements for a resource or skill to be a source of SCA as set out by Barney (Italics in the original):

1. It must be *valuable.*
2. It must be *rare* among a firm's current and potential competitors.
3. It must *be imperfectly imitable.*
4. There must not be any *strategically equivalent substitutes* for this resource.

The term *valuable* implies that the source contributes to the efficiency or effectiveness of the business and thus to the business's performance. A valuable resource, skill or strategic positioning can contribute to the sustainability of the business's CA only if it is simultaneously rare, that is, not held or possessed by and cannot be easily obtained by a large number of present or potential competitors. The author is of the opinion that this is only true in the case of finite resources, in which case, owning a part or parts of this rare resource will place the business in a superior position to its competitors. It is proposed that in the case of infinite resources, such as energy, passion, commitment, flexibility, and adaptability, the lack of rareness is not a problem. In this case the way in which these infinite resources are employed, honed and improved will deliver the SCA to the business.

The concepts and requirements for a SCA is based on the assumption that a value-creating strategy is executed by a business and is not being implemented simultaneously by a competitor, while the strategy also resists the eroding effects of competitors' short term counter-actions and medium- and long-term strategies. According to Lippman and Rumelt (1982) and Coyne (1985) resources, skills, and positioning can only be sources of SCA if they cannot be copied or imitated easily and cheaply or quickly.

Finally, they must not be able to be substituted by similar resources that would enable the current or future competitors to implement identical strategies, using similar or even very different resources, skill, or positioning mechanisms to obtain a SCA. These criteria support the argument of the author pertaining to infinite resources, since finding or creating superior levels of infinite resources, such as motivation, recognition, attitude, and innovation, could be either time-consuming or expensive or both. Further, although competitors may pursue similar strategies or resource applications or imitate specific

application, for example, code-of-conduct agreements, the specific combination of attributes that constitutes the competencies and key drivers of their success, may elude them. The study recognizes and accepts the fact that unlimited resources, such as passion, motivation and creativity, are found in or are encapsulated by limited resources, such as human capital, recognition, awards and technological advancements. One has merely to look back to the original statements concerning limited resources as reflected by Barney and Lippman.

As argued earlier, the value of each resource or competency, and of preferred positioning does not lie merely in the source itself, but in its ability to enable the business to produce attributes or elements in the value chain at lower cost, or in such as way that it is of perceived value to the business's customers or potential customers in terms of their unique key buying criteria (Coyne 1985; Bharadwaj et al. 1993).

Another critical condition added by Treacy and Wiersema (1993) is the ability of a business *to adapt to* the changing internal and external environment, customers' key buying criteria and behavior, and/or its *ability to influence* the market place to such an extent that the source of SCA remains valid and real to the business and its current and potential customers. Therefore, ongoing investment in market research and reinvestment in new and improved sources of SCA is of utmost importance to the sustainability of a business's competitive advantage. Thus, sources of competitive advantage are sustainable only if they are valuable to the business and its customers; they are rare (i.e. not easily duplicated) and they have no easy strategic substitutes or imitations.

2.2 SOURCES OF SCA

Drawing on the work of Porter (1985), Hamel and Prahalad (1990), Hunt and Morgan (1995), sources of SCA exist only if they enable the business to produce a market offering that will be of value to a market segment (a set of customers) or potential segments. That is, a source will be considered a possible source of SCA, only if is allows

the business to perform tasks in the value chain (Porter, 1985) more effectively and efficiently than its competitors.

Day and Wensley (1988) identified two main categories of sources of competitive advantages:

1. superior skills
2. superior resources.

Many authors have since elaborated on both categorical sources, expanding on the details of the specific skills and resources; as well as additional characteristics and requirements of these sources. Hunt and Morgan (1995) categorized these sources of SCA differently when they proposed that "potential resources can be most usefully categorized as:

1. financial,
2. physical,
3. human,
4. legal,
5. organizational,
6. informational, and
7. relational".

As expressed in the operational definition of SCA in this study, businesses need to conceive and implement value-creating strategies for sustained superior financial and market performance. "Superior" implies that a business seeks levels of application for its heterogeneous resources in the value-chain and in support of their differentiating strategies, to produce the necessary financial performance that exceeds their competitors'. (Hunt and Morgan 1995). These sources are, therefore, not merely the tangible ones, such as property, the labor force, technology and money; but intangible sources such as competencies, leadership skills, alliances, and time management, play a role that must be considered. In fact, some of the most important resources to be considered are those

intangible ones that collectively constitute the competencies and the culture of the business. Furthermore, although infinite resources may be in available in abundance (and earlier in this study it was proposed that resources are only valuable if not employed by or available to the firm's competitors), the author is of the opinion that they have an important place on the model, since not all businesses are aware of the role they can play in creating and maintaining a competitive advantage and since firms must actively and proactively seek to bring these sources into there business and build and maintain them through the necessary actions and strategies.

It is therefore up to management and the leadership of the business to identify the finite and infinite resources, the complement of competencies, and the preferred positioning of the business that will be of greatest short-term, medium-term and strategic benefit to the business. The author argues, like Hunt and Morgan (1995), that resources, skills and positioning are significantly heterogeneous across firms. "This means that every firm has an assortment of resources that is at least in some ways unique" (Hunt and Morgan 1995). The author also argues that a unique assortment of resources has the potential to translate into a position of SCA, but that it will not necessarily do so.

Therefore, model should rather be seen a continuum of interrelated and interdependent potential sources of SCA, rather than as a bundle of sources or contributors from which management makes a selection. It is clear that the existence of superior resources on its own, without the necessary direction, strategy, and competencies to apply them, will not be sufficient to claim a SCA. Similarly, identifying a niche market and differentiating the business to claim a preferred position in that market, even when supported by highly competent management providing good direction, will not lead to superior financial performance, unless this positioning is supported by, for example, the correct cost structure, effective and efficient processes, market-orientated staff and products.

As discussed, a common thread throughout the literature that was investigated during this study, is the fact that researchers distinguish between two broad categories of sources of competitive advantage: resources and skills. For the purposes of this study two

additional constructs will be added. A special category, "*preferred positioning*" will be added due to the nature and objectives of this study. Also, the category "unique resources" will be subdivided into "*superior finite resources* and *superior infinite resources*". This study will also broaden the area of distinctive skills (Barney 1985, Williams 1992, Lado, Boyd and Wright 1992) to *'superior competencies'*.

2.3 ADVANTAGES AND BENEFITS OF COMPETITIVE ADVANTAGES

Researchers and marketing practitioners agree that principally the sources in themselves are not the competitive advantage. Rather, they ignite, act as catalysts, or enable a business to perform the primary and secondary value activities that compose its value chain, either at a lower cost than its referents, who are often its closest competitors, or in a way that is perceived to have a differentiation advantage (Porter 1990; Barney 1991; Hamel 1991; Prahalad 1990; Hunt 1995). Superior resources and superior competencies do not inherently give the business a competitive advantage. They merely provide "the business an opportunity to leverage is skills and resources to achieve competitive cost and/or differentiation advantages" (Bharadwaj et al. 1993). Superior infinite and finite resources, superior competencies and preferred positioning facilitate the achievement of a SCA in the form of

1. superior customer value through a differentiated market offering, and/or
2. lower relative cost through cost leadership. (Porter 1985; Hunt and Morgan 1995; Bharadwaj et al. 1993.)

Hunt and Morgan (1995) argue that these two factors are really only secondary objectives, since the primary objective is "superior financial performance, which it pursues under conditions of imperfect information about customers and competitors." The author's view parallels that of Hunt and Morgan, and supports the view that "financial performance is indicated by such measures as profits and return on investments" and that "the rewards that flow to firms include not only stock dividends, capital appreciation, salaries, wages, and bonuses, but also promotions, prestige,

expanded career opportunities and feelings of accomplishment." (Porter 1990, Hunt and Morgan 1995).

A research study by Doyle and Wong (1997), reports that business performance could be assessed in the short-term by financial results, such as profits, return on capital, return on investment and in the long-term in market performance, such as sales growth, market share and customer satisfaction. They have found that "successful companies will seek to balance financial and market performance." "The best performing companies scored significantly higher on both financial and marketing measures of success. The finding suggests that these companies were pursuing robust strategies." The study also revealed that the most important driver of this performance was a differential advantage. Businesses do much better in the short- and long-term, if they are the preferred supplier, that is, if customers preferred to do business with them . The second most important driver of performance was seen as a market orientation, that is, a business philosophy rather than a set of activities executed by the marketing department. In this case, the business is seen to have real value-adding market offerings, "rather than trivial differences in packaging or advertising."

In the past accounting ratios and market measures have been used to indicate the financial performance of businesses. These measures have been criticized for "a) handling intangibles inadequately and (b) improper valuation of sources of competitive advantage" (Day and Wensley 1988; Bharadwaj et al. 1993). However, it is not the aim of this study to propose ways to *measure* performance outcomes or to provide *empirical tools* to evaluate SCA; therefore, further discussion of the merits and shortcomings of performance measures available to marketing practitioners, or those used in pervious studies, is beyond the scope of this study.

2.4 ADVANTAGES FROM THE CUSTOMER'S PERSPECTIVE

As discussed earlier, competitive advantage is expected to lead to superior financial and marketplace performance. This can be measured either through and inward focus on the

business's performance outcome measures as defined by management or the shareholders or through an outward focus, as measured and assessed by customers and competitors. Day and Wensley (1988) suggest using outwardly focused perspectives as provided by customers and competitors. As Bharadwaj, Varadarajan and Fahy (1993) note, all sources can only be considered sources of CA, if the offered benefits are desired by customers. Performance will then be linked to constructs such as branding, customer value, relationship and database marketing, alliances and business networks, continued investment in core competencies, etc. Drawing on Day and Wensley (1998) and Bharadwaj et al. (1993), the author is aligned with the proposal to use many different types of information to assess whether a SCA has been obtained, including measures of customer input such as satisfaction and loyalty, plus a competitor orientated focus such as relative resources and cost positions.

2.5 DURABILITY OF COMPETITIVE ADVANTAGES

"Every industry was once a growth industry. But some that are now riding a wave of growth enthusiasm are very much in the shadow of decline. Others, which are thought of as seasoned growth industries, have actually stopped growing. In every case the reason growth is threatened, slowed, or stopped is **NOT** because the market is saturated. It is because there has been a failure of management." (Theodore Levitt 1964 – Boldface and underline added.)

This quote from the early work of Theodore Levitt, and a quote from Emerson that says "Invention breeds invention", confirm what we can see daily in the marketplace; that is, that CA depreciates either slowly, or in quite fast in some cases, if not maintained, adapted or revised. Since the primary focus of all businesses, is to seek superior financial performance (with the obvious exclusion of non-profit organizations), businesses will by nature attempt to gain the comparative advantage and will through actions and strategies attempt to neutralize their competitor's advantages (Hunt and Morgan 1995).

Hunt and Morgan (1995) further argue that "sustainable superior financial performance occurs only when a firm's comparative advantage in resources continues to yield a position of competitive advantage despite the actions of competitors." The author proposes adding to this argument skills or competencies and the firm's positioning and other intangible such as brand, reputation, alliances and networks, information and communication. Further, drawing on the work of Brahadwaj et al. (1993), certain sources of CA "may be more enduring than others". Clearly the durability of a business's competitive advantage is contingent on many internal and external aspects involved in the practices, activities, policies and strategies of the business **and** those influencing the business.

Although the many papers could be found on the topic of sources of CA, not many focused on which advantages are **sustainable,** or why certain sources of CA would be more **durable** than others. Robert Grant (1991) points to four determinants of SCA: (1) durability of the source itself, (2) transparency, (3) transferability, and (4) replicability. In his paper "Sustainable Advantage", Ghemawat (1986) attempts to answer the question: " Which advantages tend to be sustainable and why?" He identifies three categories, they are: (1) targeted market, (2) superior access to resources or customers, and (3) restrictions on competitors' options.

Based on these and other studies (Barney 1991; Coyne 1985; Bharadwaj et al. 1993; Day and Wensley 1988; Doyle and Wong 1997), the author proposes that the sustainability of CA sources need to be discussed in close relation to the source itself. However, since the advantage is not only inherent to the sources, it is also dependent on the composition and combination of sources, management's ability to apply them in value-chain activities (Porter 1985, 1991), also in terms of certain overriding or generic and multi-dimensional issues.

2.5.1 Competition

2.5.1.1 Competition in micro and macro economies

Hunt and Morgan (1995) explain the role of competition in the micro and macro economies and the "radical heterogeneity" of firms throughout the world. This study supports the Comparative Advantage Theory, as opposed to the Neoclassical Theory, in three ways. First, demand within an industry is "significantly heterogeneous and dynamic"; i.e. demand and even business motive are motivated by the constrained self-interest of customers and firms, and is constantly changing" (Dickson 1992). Second, relative competitive success is based on creating and maintaining a comparative advantage, rather than on quantity adjustment of either the produce or the plant and various resources. Third, the environment severely influences the businesses' conduct, market and financial performance.

2.5.1.2 Imperfection of information

Customer and competitive information is imperfect - and too costly in terms of time and money to perfect. With this in mind, it is obvious to deduce that some business achieve comparative advantages over their competitors through an element of "luck" (Barney 1986; Bharadwaj 1993; Hunt and Morgan 1995) as well as through the "sub-optimal decisions made by competitors" (Bharadwaj et al. 1993). This study argues that although perfect information is both illusive and practically impossible, the way to reduce the proportional role that so-called luck will play in the durability of a CA of a firm, is to adopt a strategy of constantly gathering and analyzing better environmental and organizational information than one's competitors (Barney 1986; Hunt and Morgan 1995; Bharadwaj et al. 1993).

2.5.1.3 Barriers to sustaining an advantage

Although management's ability to identify, implement, monitor and adapt strategies, play a large role in sustaining a CA, one has to add the point as reflected by Ghemawat (1986) in the article "Sustainable Advantage": "Not all industries offer equal opportunities to sustain an advantage. First-mover advantages tend to be most potent in industries characterized by durable, irreversible, market-specific assets, either tangible or intangible. Industries that evolve gradually offer more room to sustain advantages than those that are regularly rocked by drastic changes in technology or demand. And sustainability is more accessible in industries with more than one dominant strategy because competitors may not have the same options they do."

2.5.1.4 Barriers to competitors

A large body of research and several articles exist on barriers to entry and barriers to imitation. They conclude that in the absence of competition there is obviously a greater chance that a business will retain its SCA. For this reason entry barriers, an asset of the industry rather than of the business, will be of benefit when aiming at ensuring the durability of a CA. Most authors also agree that, in the presence of competition, the durability of a firm's CA can be sustained and even prolonged, by introducing barriers to imitation and transferal. (Dierickx and Cool 1989; Grant 1991; Bharadwaj et al 1993; Hunt and Morgan 1995.)

Bharadwaj et al. proposes that barriers to imitation can be erected by using *isolating mechanisms*. These mechanisms are not merely "casual ambiguity" that would exist in the marketplace, but consciously designed factors to prevent rivalry in the industry. The **speed** at which competitors can imitate the firm's CA, will affect the sustainability of a firm's CA. (Grant 1991). Three ways in which to affect the speed, is through (1) the transparency, or access to information, of which source or specific assortment of sources underlies the rival's CA(s), (2) the

ability to duplicate, replicate these capabilities or sources, and (3) acquisition or transferability - amassing the resources, competencies and/or positioning required for effective rivalry. Lippman and Rumelt (1984) contend in their article on "*uncertain* imitability" that the greater the uncertainty within a market over how successful firms achieve their success, the more inhibiting to entry or imitation by rivals and the higher the level of profits established firms can maintain within the market. In contrast to this, Grant (1991) claims that pure *access* to a resource (take oil, precious metals, innovative skills and technology as examples) could be a limiting factor in duplicating a successful strategy. Further, transferability of resources - even if one's rival is aware of which resources they need to amass - could be limited by: geographical immobility, firm-specific resources and immobility due to the assortment of or combination of resources required for the CA (Grant 1991). Should imperfect transferability or a unique blend of firm competencies prevent a rival from duplicating sources of CA, a rival business could invest in internal capability replication. Some sources are easily replicated (e.g. accounting systems and associations), while others are much less easily replicable, such as those based on complex organizational systems and processes – "the inter-connective ness of resources/skills stock" (Fahy 1993). In some severe cases, "time compression diseconomies", referring to difficulties in "catching up", as well as "mass efficiencies" of replicating sources, may reduce the effectiveness of the replication by the rival business (Grant 1991; Bharadwaj et al. 1993). Bharadwaj et al. further argue that the use of tacit knowledge (more than codified knowledge) and presence of co-specialized assets will impede a rival's abilities to imitate new or sustained sources of CA.

2.5.1.5 Disadvantage of imitation

The author has made several points about preventing other businesses from benefiting from the success of our enterprise. In contrast to this, imitating successful competitors' activities and strategies could lead to a decline in a firm's

own SCA, since this may result in the firm overlooking vital environmental and organizational changes which may impact the future (Bonoma 1992).

2.5.2. Marketing Inertia

Levitt (1964) points out that it is through the failure of management that a business will lose its CA or growth potential. Thomas Bonoma (1992) labels the inability of management to adapt to market changes as "marketing inertia". The title of his article: "Market success can breed 'Marketing Inertia'", points to the reluctance of successful businesses to change practices and strategies, in the face of market and customers' attitude changes. [Bonoma mentions at least 5 ways in which to deal with management inertia, but the scope of this study prevents the further discussion thereof.] The author proposes that some of the most critical tasks of management with regards to SCA, is therefore to (1) to seek ways, pro-actively and consciously, in which to continually gather accurate information in order to recognize and understand current strategies, marketplace structures, market practices (including competitor actions and strategies), market conditions, customer preferences and customers' key purchasing drivers and behaviors better; (2) to select new or preferred strategies and tactics; (3) to implement or manage the chosen strategies and (4) to modify them as information becomes available.

Although management's ability to identify, implement, monitoring and adapt strategies, play a large role in sustaining a/the CA(s), one has to add the point as reflected in the article *Sustainable Advantage* by Ghemawat (1986): "Not all industries offer equal opportunities to sustain an advantage. First-mover advantages tend to be most potent in industries characterized by durable, irreversible, market-specific assets, either tangible or intangible. Industries that evolve gradually, offer more room to sustain advantages than those that are regularly rocked by drastic changes in technology or demand. And sustainability is more accessible in industries with more than one dominant strategy because competitors may not have the same options they do."

The real test for leadership is to identify the need to and the direction for change, before failure or disaster strikes!

3. INTRODUCTION TO THE DISCUSSION OF THE MODEL

Brief mention must be made of the interrelations and interdependence of the constructs and concepts encapsulated by the model before attempting to classify information into clearly defined segments. The reader will quickly notice that the concepts discussed might equally well have been discussed under a different construct, forming part of a different area (e.g. positioning, resources or competence), than in the area the author has selected. One example would be the importance of management's role in promoting and recognizing innovation. This concept could have been discussed under the headings "Leadership - and its Role in Defining Culture", " Role Models: Acting as Coaches and Mentors" , "Innovation and Creativity", "Recognition" or even "Human Capital".

Firstly, it is the view of the author that it will be impossible to find an absolutely, unassailable single category, since all aspects are interrelated and inter-connected. Secondly, the model is not a linear model as it does not attempt to classify sources, but rather to make sure that most, if not all, sources of competitive advantage are mentioned and that readers understand their possible role in creating a SCA for their businesses. Lastly and most importantly, corporate strategy and CAs is a system of interdependent parts. Their success depends not only on a diversity of elements and the quality of that element, but also on the combinations of these elements and their ability to reinforce one another.

3.1 PREFERRED POSITION

Most literature on CA broadly categorizes two **positional** advantages:
(1) cost leadership and, (2) differentiation advantages (Levitt 1980; Porter 1985; Bharadwaj et al. 1993; Pitt 1997). Cost leadership means delivering a parity market

offering to the customer, whilst performing most activities at a lower cost than competitors. Differentiation advantages entails delivering an offering to customers for which they perceive the important attributes to be consistently different that the competitors' market offerings. Seen in the light of a global marketplace, with increasing levels of consumerism and competitors from previously non-competing industries entering the marketplace, to achieve a CA is becoming more difficult and more important.

The author argues, in agreement with others such as Levitt (1980), Gale (1994) and Pitt (1997), that marketers are - and will be increasingly - expected to balance their ability to be considered by the customer (i.e., have "qualifying attributes") and to be chosen by the customer (i.e. have "determinant attributes"), with the firm's need to keep costs to a minimum. It has been predicted - and reality has confirmed - that it will be increasingly "minor" attributes of market offerings that will distinguish competitive offerings, since there will be parity of the important attributes (Levitt 1980; D' Aveni 1994; Pitt 1997). As competition intensifies and customers become more demanding and sophisticated, marketing strategists and practitioners will increasingly need to identify dynamic sources of key value that can create a CA, not to mention a SCA.

The author further argues that the firm's choice about the place it owns in the mind of the customer is going to become of imperative value, and may even be the *only* distinguishing factor for imperfectly informed customers to make their buying decisions. Differentiation in terms of the firm's top-of-mind position, or perception of "conformance" (Gale 1994) may be the only difference in the customer's perception of value. Since customers have imperfect information and since it will be both too costly in terms of time and money to attain "perfect" information, they "take and chance" when buying products or services. The more information, choices, alternatives and qualifying attributes firms offer, the riskier and more complex their buying decisions, and the more they are likely to base buying decisions on "minor" attributes and proxies (e.g., reputation is a proxy for quality [Bharadwaj et al. 1993]), such as brand equity and value propositions. Further, the more difficult it becomes to evaluate the quality/value of key

buying criteria, the more likely buyers are to allow brand reputation to act as a proxy for key buying criteria.

Finally, the author concludes that the marketplace of the future will increasingly be dominated by market players with new game strategies and by firms that have gained competitive advantages by "breaking the proverbial mold". Innovative new game strategies and strategic innovations have given businesses new ways to influence the environment, reshape market and customer behavior and will increasingly do so in the future. In addition to this, changes to almost all aspects of the business and its environment happen and will continue to happen at an increasingly rapid pace (Harvey and Denton 1999).

It is for these reasons that the conceptual model proposed here, gives recognition to this increased importance of positioning through differentiators, cost positioning, category definition and selection, and tactical and strategic leadership, including effective change management.

Following is a look at the individual constructs of Preferred Positioning.

3.1.1 Cost Positioning or Cost Leadership

Creating a market offering – a product, a service or a marketable idea - at a low cost, while achieving high value, is one of the many alternative sources businesses might wish to pursue in order to attain a CA or even SCAs. There are two clearly distinguishable areas of differentiation for cost: Low cost/ perceived high value and high cost/perceived high value (or exclusivity).

A study done by Doyle and Wong (1997) explored ways in which marketing can contribute, within the broader business model, to international competitiveness. One of the hypotheses researched was this: " Successful companies seek balanced financial and marketing performance". Their results showed very

clearly that high performers set out to and achieve balanced performance in both financial and sales results.

In today's marketplace where many market offerings are forced to become commodities, identifying cost-cutting opportunities through economies of scale and economies of scope requires considerable insight, and is almost critical to the long-term survival of the enterprise. Economies of scale can be employed to take best advantage of, for example, large production plants, efficiencies of systems and procedures, on-going R&D investments, large supplier and distributor networks; thus reducing the unit cost of production and finally the cost to the consumer.

"Economies of scope are realized when a firm is able to market entirely new services with little added costs through networks or systems previously established for current services" (Bharadwaj et al. 1993. Marketing practitioners looking for SCAs may have to look no further than their current customer bases. Offering a broader set of products or services to their customer bases – with whom they should have intimate relationships and a collection of highly personalized data – may improve the firm's effectiveness and efficiency of dealing with their own customers, making it difficult for competitors to enter or expand.

For multi-business firms, opportunities to use cost and demand synergies in their favor and to the disadvantage of their competitors, may be encapsulated in:

1. the reduction of costs by sharing activities between businesses
2. increased revenues by cross-selling between different businesses in the firm's portfolio; and
3. shared competencies, resources, experiences and shared benefit of corporate reputation.

An important additional benefit stressed by Bharadwaj et al. (1993) is that "competitive cost and differentiation advantages associated with synergy are less

likely to be imitated, because they are often achieved under a unique set of circumstances as well as on the basis of unique firm specific resources and skills base."

3.1.2 DIFFERENTIAL ADVANTAGES

The study by Doyle and Wong (1997, showed that " higher performers had considerably greater ratings for possessing a strong differential advantage." Firms have to do more than merely gain advantages through product and service innovations. That strategy will simply provide temporary advantages. They also have to prove to be a partner to do business consistently in the long-term. Successful business will have differential advantages in terms of products, services and overall company reputation. (Hamel and Prahalad 1994, Doyle and Wong 1997).

Differentiation or performing at a *distinguishable level in comparison to competitive businesses,* is obviously central to the concept of comparative advantages. It would, therefore, not be surprising to have the reader question the need to incorporate a separate construct for differentiating strategy under the heading "Preferred Positioning". In parallel with, and expanding on the works of, authors such as Hout et al. (1982), Porter and Millar (1985), Day and Fahey (1988), Baharadwaj et al. (1993), Hunt and Morgan (1995), Doyle and Wong (1997), Parasuraman (1997), Slater (1997, the author proposes to focus on the concepts of multi-unit businesses, global enterprises and issues such as size, scope and scale.

A dynamic strategy demands that businesses actively search for differentiators in the value chain. The strategy of differentiation entails becoming a long-term partner to customers, integrated into their value change and cost structure in such a way that the firm becomes indispensable as a business partner.

In the arena of international competition, companies rely on global strategies to succeed in the marketplace - and market space. " That calls on the company to think of the world as one market instead of as a collection of national markets and sometimes requires decisions as unconventional as accepting projects with low ROIs, because of their competitive payoff. An organization with such a global focus formulates long-term strategy for the company as a whole and then orchestrates the strategies of local subsidiaries accordingly." Such businesses place their entire global system of product and market position against their competitors (Hout et al. 1982). They do business as a collection of multi-domestic firms, but rather as one enterprise with a common mission and vision in mind. "They all perceive competition as global and formulate strategy on an integrated, worldwide basis. This line of strategic analysis and strategy design may differ substantially from a strategy concerned with competitive advantages based on a small local competition base, or even a larger nationally confined competition base, and from businesses that performs as a group of multi-domestic stand-alone businesses."

This brings us to the issue economies of scale and economy of scope. (These economies of scale and scope have obvious implications on cost structures and costing strategies, but since it is of particular importance for global firms, it will be dealt with here.) These two issues are of obvious importance as potential source of competitive advantage for both goods and services industries and have been extensively researched and discussed in business literature. (Upah, 1980; Quinn and Gagnon, 1986; Porter, 1990; Peters, 1992; Bharadwaj et al., 1993).

Not all firms aspire to or even lend themselves to becoming a global market player. Should the economies of scale not lead to benefits with regards to a) reduced unit costs or, b) superior resource assortments and/or c) superior positioning (e.g. company reputation or service) that are greater than the additional cost of service that market, a firm may want to refrain from becoming a global player (Porter, 1985).

There are almost always heavy investments required to realize the global potential, and there are obviously no guarantees that businesses will succeed. In taking the risks involved in globalization, such as having the CA compromised due to early mistakes, and increased investment in distribution costs, government barriers to trade; the business may gain some cost positioning benefits, and first-mover advantages such as access to limited or restricted resources and creating barriers to entries by competing firms, but the greatest CA might lie in gaining a proprietary advantage and brand equity, plus achieving high levels of market penetration due to early entry (Biro 1998). Mention must be made here of the risks of quick imitation by competitors, and thus questions about the sustainability of the CA should be thoroughly researched. A viewpoint offered by Bharadwaj et al. (1993) is that " competitive cost and differentiation advantages associated with synergy are less likely to be imitated, because these are often achieved under a unique set of circumstances as well as on the basis of unique firm-specific resources and skills base."

The issue of brand equity deserves a dedicated study of its own, but the author will attempt to do it justice under the construct of *Category* in the section: Preferred Positioning.

3.1.3 Distinctive Category

In their Book *The 22 Immutable Laws of Marketing*, Al Ries and Jack Trout (1994) refer to the second law of marketing as "the law of category". They content that a business will achieve increased levels of marketing success if it is able to find a distinguishable category (either in market offering, in brand positioning or in industry sector) in which to compete. They also contend that once a firm has attained the leadership position, in terms of perception by customers and potential customers, new entrants will actively search for ways in which imitate or replicate the firm with the CA. Given this argument, setting up

barriers to entry and barriers to imitation and implication will distinguish the astute marketer from the rest of the pack. Since durability and ability to imitate and replicate has been discussed earlier, the author points out here merely that trade barriers may help a category leader to bar competitors from penetrating the market or limit their effectiveness upon entering the industry category. To slow competitors' responses down, marketers may use such discouragers or strategies, as the *brand equity* they have achieved by being a first-mover, "*owning*" the largest or most important *customers* in that industry segment, *blocking* competitors' *access* to distributors or retailers and *spatial preemption* (i.e. "taking the best spots" (Hout et al.1982).

Numerous articles of academic nature and in business literature refer to the concept of brand assets or brand equity. Aaker (1991) defines brand equity as "a set of brand assets and liabilities linked to a brand, its name and symbol that add or subtract from the value provided by a product to a firm and/or a firm's customers." Five categories of assets are set out in his article: (1) brand loyalty, (2) name awareness, (3) perceived quality, (4) brand associations, and (5) proprietary brand assets such as patents and symbols. Berry and Parasuraman (1991) add that in the case of services, the name of the firm itself could provide a firm with brand equity. This could be a source of CA, since a well-established brand will allow firms to expand or diversify into new market offerings and even new market categories at lower acquisition cost than their competitors. In an empirical study of marketing and competitive performance, Doyle and Wong (1997) have found that high performers understood branding values better, and invested more effort in training staff in marketing, than lower performance companies. In addition, higher performers "appreciate clearly expressed brand values were effective means of differentiating themselves and adding value."

To attain and retain a CA in the global market place, requires insight and vision, since business managers will have to preempt market trends, trends in consumer buying behavior, emerging markets and even marketplaces. Since most industries

or industry categories have only a few customers that dominate the market (80/20 rule), category leaders should cement their CA by attaining and retaining the most important customers and prospects in that industry category. By blocking access to major customers, the category leader prevents current or prospective competitors from generating sufficient sales. (Hout et al. 1982) In similar vein, competitors may be denied access to distributors and retailers, through pre-emptitive and exclusive contracts.

Estate agents refer to physical location of a property or building as the 'location'. The value of the property is directly affected and in some cases absolutely determined by the location of that property. Similarly, in the sales of goods, there is clear evidence that the placement (location, geographic placement, shelf-space, etc.) of the goods plays a vital role in the sales success, especially when launched. In service goods, Allen (1988) argues that demand for a service is mostly based on convenience; ideal service location is of critical importance to initial and future successes. Taking a first-mover position in a new category, gives the pioneering firm spatial preemption by allowing it to identify prime property and strategic locations, denying competitors access to achieving better facility utilization. As discussed earlier increased response lag time will, in most cases, lead to a cost advantage and often differentiation and positioning advantages (Bharadwaj et al 1993). This is especially true in the case of multi-domestic, multi-unit and global companies. The sustainability of the advantage(s) will depend on both the firm's the leader ability (normally displayed by the leadership corps) to explore ways to sustain the advantage(s) and the competitors' (followers) ability to neutralize the advantage(s) enjoyed by the pioneering firm or leader.

3.1.4 Global Strategic Focus/(Leadership)

The selection and employment of business leaders could for obvious reasons resort under the heading *"Superior Competence"*. In this section the author looks mainly into the directional, leadership and executive role of management;

which is to recognize, understand, create, select, implement and modify strategies. In other words, to steer the business in defining its preferred positioning, finding and keeping superior resources and superior competencies, or combining resources in unique assortments and monitoring their success in order to modify in time, should it be necessary. In their article *The Comparative Advantage Theory of Competition*, Hunt & Morgan (1995) states: " The accumulated evidence, therefore, strongly supports our theory's position that environmental factors merely influence, not totally determine firm performance. In short, human agency matters. Strategic choices matter."

In parallel with this, Petrick et al (1999) points to four management practices for improving strategic competitiveness:

1. Global leadership skills
2. Executive oversight responsibilities for global corporate reputation
3. An annual global reputation audit and global awards
4. Rankings to focus momentum on the key intangible resources for SCA in the 21st century."

In short, leaders must make the decisions. Although the market place clearly plays a critical role in the success or failure of the firm, the marketplace does not determine the businesses' success. Superior resources and superior skills do not naturally migrate towards each other. It is the premise of the author that specialized resources are attracted and combined, channeled and developed into a synergistic whole to achieve a SCA. Similarly, the positioning (i.e. reputation, image and brand value) of a business is determined by a large number of factors, steered by people of the business. In the same vein, decisions about the assortment and combinations of resources is up to someone or some group of leaders. "Like all organizations, business corporations reflect the attitudes of the people who run them" (Doyle and Hooley, 1992).

In an article by Hout, Porter and Rudden (1982), they attempt to answer the question: " How do these American producers hold and even increase profitability against international competition?" Their answer was, "By forging integrated, global strategies to exploit their potential; and by having a long-term outlook, investing aggressively, managing factories carefully." The author believes that this is true of many global and multi-unit businesses around the world. Leaders are responsible for preempting market trends and setting organizational goals. They drive the direction or act as the role models for the *corporate culture* and mould their businesses over time with important decisions about, for example ethics, values and business procedures. It is the leaders who orchestrate the synergies and make sure that all energies drive in the same direction and towards to same corporate global goal (*capability leadership*). It is also these leaders who synchronize the strategies of multi-unit business into a harmonic whole. They hold overall responsibility for the integration of strategies and offer guidance and direction. They are often the *change catalysts* and *change agents* as well as the change managers of the enterprise. These leaders are, in effect, the CA. The rest of the resources and skills, are merely their tools to achieve their dreams and execute their strategies and visions. Although serious academic and popular business magazines of the nineties do not necessarily agree on the exact importance or priority of visionary leadership, they do seem to agree that leadership who fail to be visionaries, will not remain a competitive force for long (Giordan 1995; *Fortune Magazine* 1993)

It must be added that (1) not all leaders will be a source of CA for a business, and (2) the sustainability of this specific CA will depend largely on the individual leaders and their ability to communicate their insights and expertise and to optimize the potential of *all* the resources, both finite and finite, and all the competencies under their leadership. However, neither of these factors distracts from the importance of owning and honing the CA of leadership for the enterprise.

The author has referred to the strategic orientation of the leadership corpse in the previous paragraphs. Much has been written about businesses' attempts to cope effectively with global competitive pressures while attempting to build and maintain CA(s). The scope of this study does not allow us to expand further on the important concept of a long-term, market-driven global strategy in creating a SCA. (See Day and Nedungadi 1994; Stalk et al. 1992; Day 1990; Hamel et al. 1989.)

The last word on leadership must be dedicated to the role of the management team to inspire and enthuse the employees, suppliers and customers about the value the business can add to their lives, or their jobs. It is said that the single biggest contributor to the success of two of the most famous business people, Bill Gates and John D. Rockefeller is/was their ability to inspire the people under their management. It is they who are/were responsible for getting people to believe in their visions of the future and helping them make those dreams realities. In the same vein, responsibility for exploring new basis of CA will almost always remain squarely and ultimately on the shoulders of leadership.

In his article:" Toward a General Theory of Competitive Rationality" (1992), Peter Dickson states, "Firms that are more competitive have a stronger drive to improve their marketplace performance, information systems and decision makers that are more sensitive tot changes in the environment, and superior implementation skills. The drive to improve depends on personal motivations, which in turn depends on personality, the reward system and ***the leadership and encouragement provided by superiors"*** *(Italics and boldface added).*

3.2 DISTINCTIVE OR SUPERIOR COMPETENCIES AND CAPABILITIES

Researchers generally capture this source of CA under the concept heading *unique skills (capabilities)*. Certain arguments, however, led the author to label the concept "distinctive competencies". Firstly, the author shares Bharadwaj's position that a unique

assortment of and unique way in which leadership combines and extracts the optimal contribution of each one of its resources, provides the CA(s) by contributing to the value-chain. Secondly, skills in itself do not provide the SCA, but they provide only the opportunity for business leaders to "leverage its skills (and resources) to achieve cost and/or differentiation advantages" (Bharadwaj et al. 1993). Therefore, skills without the necessary experience and implementation expertise, coordination, synergy, organizational structures and business processes, will not achieve the desired SCA(s). Thirdly, in our opinion word *skills* is normally linked to a human being and, in the new era of technology-embodied competencies and knowledge and information-based economies, it would be an oversight to limit SCA to human skills and human competencies only.

The word *skill* could not be found in the 5 Marketing Dictionaries approached, but the Webster Encyclopedia Dictionary of the English Language (1970) defines *skills* as "having a familiar knowledge". Synonyms provided are: *adroit, clever, expert* and *apt. Competence*, in contrast, is defined as "the ideal psychological ability providing the basis for action". The Dictionary of Marketing Terms defines *distinctive competencies* as "the strengths of the firm". That is, "the particular characteristics of the firm that make it uniquely adapted to carry out its task(s) and to fulfill its purpose(s) in the industry within which it participates". Lastly, according to Stalk et al. (1992) most companies do not start out as capability-based competitors. Although the same skills and capabilities may be present, using them as sources of CA requires senior managers to undergo a paradigm shift. "The starting point is a fundamental shift in perception that allows them to see their business in terms of strategic capabilities. Then they begin to identify and link together essential business processes to serve customer needs. Finally, they can reshape the organization – to encourage the *new kind of behavior* necessary to make capabilities-based competition work" (italics added).

There is obviously a huge spectrum of competencies, not just across the border of different industries, but even within the same focus segment within the same industry. Competencies that work well and contributes successfully to the SCA of one business, may not necessarily work well for all companies. What will prevail though, are

competencies that are consistent with the vision and strategies of the specific business, given the operating context and different kinds of resources of that business (Collins and Montgomery 1998).

In their article "The Comparative Advantage Theory of Competition", Hunt and Morgan (1995) reconfirm the author's earlier argument that a comparative advantage will exist only if the *competency assortment* enables it to produce a market offering or offerings that, relative to extant offerings by competitors, (1) is perceived by some market segments to have superior value and/or (2) can be produced at lower costs. So, again, superior competence can translate into a CA, or even a SCA, but it will not necessarily do so. "Capabilities are often mutually exclusive; choosing the right ones is the essence of strategy." (Stalk et al. 1992).

The following two issues surfaced over and over in the literature on competencies:

1. Continued review of and reinvestment in core competencies, and
2 The ability of the leadership corpse to identify important competencies and skills and to assist all levels of staff to learn from the market and from each other.

Stalk et al. (1992) suggest four basic principles of capabilities-based competition and, therefore, CA: "(1) The building blocks of corporate strategy are not products and markets but business processes. (2) Competitive success depends on transforming a company's key processes into strategic capabilities that consistently provide superior value to the customer. (3) Companies create these capabilities by making strategic investments in a support infrastructure that links together and transcends traditional SBUs and functions. (4) Because capabilities necessarily cross functions, the champion of a capabilities-based strategy is the CEO."

Merely owning a set of capabilities will not provide a *sustainable/durable* competitive advantage. Once more, the role of leadership in recognizing, optimizing and nurturing the opportunities provided by a set - even a very good set - of capabilities, comes into play and must be stressed. (Prahalad and Hammel 1990; Dickson 1992; Stalk at al 1992;

Lado et al. 1992; Bharadwaj et al. 1993; Terpstra 1994; Doyle and Wong 1997; Collins and Montgomery 1998.).

This brings us to the issue of *strategic selection.* It is obvious from earlier statements that the author argues that the role of management - in attaining the CA and sustaining the CA provided by the superior competencies - is of strategic value to the firm, and that although "luck" will play some role in the success (or failure) of a business's earning potential (Barney 1986, Manke 1974), the author argues, in parallel with Lado et al. that good fortune, or luck, may become a factor at the point where opportunity and acquired/cultivated firm-specific competencies and resource meet. The acquisition of superior competencies (and resources) is in contrast with *natural selection* , to the extent that a set of pro-active strategic actions and decisions leads to the CA, rather than "luck". In parallel with Lado et al. (1992), the author supports the perspective that SCA may be obtained when leadership creates and grasps internal and external opportunities - therefore the word *selection* - for superior competencies and capabilities , rather than executing mere choice from a set of given alternatives. This approach acknowledges management's pro-activeness in influencing market and financial performance and focuses attention on organizational variables important for creating and sustaining CA(s).

The concept of superior competencies with regards to the sustainability of CA, needs to be further developed by relating competencies to *ambiguity* (De Fillipi 1990, Lado et al. 1992). Lippman and Rumelt (1982) defined casual ambiguity as the "basic ambiguity concerning the nature of the causal connections between actions and results". They argued that creating and maintaining a CA requires continued investment in core competencies and expertise development that are (1) non-codifiable and non-explicitly replicable, (2) complexly interrelated to other knowledge-based competencies and (3) not easily transferable to alternative use without substantial costs (Reed and DeFillipi 1990; Williamson 1985; Winter 1987).

Lado et al. (1992) produced a competency-based model of SCA, based on four components of a firm's distinctive competencies, that is, managerial competencies, and resource-based, transformation-based and output-based competencies.

3.2.1 Managerial & Leadership Competencies

The role of leadership in defining and directing resources and competencies towards a common vision and global strategy has been discussed under the heading "P*referred Positioning*", but in order to give their contribution the merit it deserves, the author will place special focus on the role of management as it relates to competencies, which will be referred to as "managerial competencies". The basic premise is, in parallel with that of Lado et al. (1992) and Bourgeois (1984), that resources do not merely "accrue" but may be - and must be - systematically developed by the conscious choices and actions of the business's strategic leaders. The author further argues that defining and implementing a vision for the firm is a task of management that will form the core or foundation of the firm, around which all resources must be selected, developed and mobilized.[3)] Furthermore, top managers will have an instrumental role in interpreting and analyzing information received from the environment in order to identify opportunities and threats to the firm and its CA(s) and, in return, influencing the environment for best results. Similarly, the management team will play a pivotal role in identifying the strength and weaknesses of resources and exploiting all opportunities to optimize the contribution of the resources to the performance of the business.

Lado, Boyd and Wright further define their competency-based model in terms of resource-based, transformation-based and output-based competencies. The author will deal with the concepts of resource and output-based competencies under the

[3)] This is in obvious contrast to the viewpoint of Kerr and Jackofski (1989) that management should be selected to "fit" the strategy.

headings of *Infinite and Finite Resources*, below. (For a more detailed treatment of their line of thought see Schoemaker (1990), and Lado et al. (1992.))

Concerning transformation-based competencies, Lado, Boyd and Wright refer to concepts such as organizational culture, economies of scale and cost, value-chain contributors, change management and innovation and differentiation and have been dealt with or will be dealt with in other areas of this model, so the brief discussion ends with the following observations:
(a) All factors in this list do not accrue naturally, but are pro-actively created and driven by the efforts of the firm's agents; (b) all factors could, but will not necessarily contribute to SCA(s) and must be idiosyncratic to the business in order to provide a SCA; (c) all gains may be eroded over time through imitation, replication and shifting consumer buying trends and, therefore, reinvesting in competencies may not be enough to sustain the CA of a firm; (d) the afore-mentioned shifts and erosion of advantage must be monitored and countered by pro-active strategic decisions and tactical actions; and (e) should firms invest in competencies or resources (potential sources of CA), these sources should have the potential to generate exceptional/superior/above normal returns (Barney, 1986).

Collis and Montgomery (1998) profess that competencies and key resources are important to the firm, in that they are "at the heart of the corporate strategy". This corporate strategy, in return, is guided by how the business as a whole should and will create value. Since business is a system of interrelated parts, the success and CA depends not only on the "quality of the individual parts, but also on how the elements reinforce one another."

3.2.2 Human Resources/Human Capital/Employee-based Competencies

This study attempts to broaden the concept of managerial competencies by adding human resource management (HRM) or human capital (HC) as another important potential source of SCA. The nature of this study does not allow the luxury of in-depth study or discussion of the field of HRM, and the following brief statements will have to suffice in leading marketing practitioners to their own conclusion. Firms will have to find ways to become more productive, more efficient and more competitive. Empirical research confirms that businesses with sound staffing practices are more profitable than those without (Terpstra and Robinson 1992). Another article by David Terpstra (1994) identifies nine HRM practices that will contribute to CA by boosting employee performance and work-force productivity: The source of CA can be found in their HRM practices. These practices are (1) recruitment studies, (2) validation studies, (3) cognitive aptitude and ability tests, (4) biographical information banks, (5) structured interviews, (6) goal setting , (7) rigorous evaluations of development activities, (8) job design and (9) motivational practices. We share Terpstra's last word and overall sense of importance of the matter : "In the increasingly competitive environment that is emerging, managers will have little room for error. Potential employees and potential HRM (*and other management practices)* should be chosen on the basis of empirical data *(or thoroughly tested pilot cases)"* (Italics added).

3.2.3 Technology-Embodied Competencies

New technologies have, over the ages, offered in almost all industries, new avenues of competitive advantage(s). Take telemarketing and e-commerce as two cases in point. For those businesses eager to learn and to embrace the opportunities, the technological advancement have often opened doors to SCA(s). This is true in some cases, but not in all. Firms have to identify the opportunities offered by technological advancements, analyze their abilities to contribute to the key competencies (Collis and Montgomery 1998) and/or the value chain (Porter

1990). They also have to analyze the probability of providing new ways to outperform competitors, the possibly build new or strengthened barriers to entry (Bharadwaj et al. 1993) or change the rules of the game completely (Porter and Millar 1985). After all this, they must decide how to implement/adapt it to suit their strategic imperative in the best possible way.

This study refers to a number of technologies, other than IT. These include all contributions by science to improve the efficiency of any of the business processes through tangible resources such as new production fibres like Polartec; new ways to communicate with customers such as by Internet and Short-Message Systems on cellular phones; new ways to distribute products, such as via direct channels, new product categories such as DVDs; new ordering methods, such as direct satellite communication systems and online inventory.

In this era of marketing in an information and knowledge intensive environment, it seems appropriate to dedicate a section to highlight some key points concerning the specialized area of information technology (IT). Gernstein (1987) defines IT as the collective means of assembling and electronically storing, transmitting, processing and retrieving words, numbers, images and sounds. This capability, is technology-based competence and is of obvious importance to firms, all of which have masses of data to collect and store. A large body of detailed insights from diverse fields of study (management, processes, project management, engineering, etc.) is available on this topic, and IT's obvious importance as a potential source of SCA cannot be denied. Drawing on the work of Bharadwaj et al. (1993), Glazer (1991), Little (1991), Porter (1990), and Prahalad (1990), this section will highlight some key points.

1. IT can assist in gaining a CA by providing firms with new ways to lower costs and/or to enhance differentiating value-chain contributors through benefits such as information bundling, service and product personalization.

2. IT has the potential to make new technologies feasible, leading to new businesses, access to new markets or new products to existing markets.
3. IT can deter exit of customers by introducing or increasing the costs of switching, thereby making it more difficult for new entrants or competing businesses.
4. IT can reduce the response time to market and demand changes.

Several studies over the last decade or two can provide useful insights into the potential opportunities for capitalizing on information technology and the importance of IT as a source of CA: Bharadwaj et al. (1993), Benjamin et al., (1984), Cash and Konsynski (1985), Glazer (1991), Hawkins (1992), Little (1990), Porter & Millar (1985), and Weill (1992).

Businesses should continually invest in skills and capabilities that are strategically aligned with the business (Lado et al. 1992), causally ambiguous (Lippman, Rumelt 1982; Reed and DeFillipi 1990), not imperfectly mobile (Dierickx and Cool 1989). SCA requires the constant monitoring of and reinvesting in the present sources of advantage, as well as investing in other potential sources of advantage. In the words of Michael Porter (1985), " A firm must offer a moving target to its competitors, by reinvesting in order to continually improve its position."

3.3 SUPERIOR RESOURCES

Normally the word *resources* bring to mind limiting factors and mostly tangibles, such as money, equipment, people, and technology. Since the purpose of this study is to provide marketing practitioners with a model against which to compare the businesses' strategies and tactics, "and rise above their current market and financial performance", the section on resources will be divided into two separate, but interrelated and interdependent concepts in order to give recognition to the diverse sources that should be considered

when planning to achieve SCA(s). These are **superior infinite resources** and **superior finite resources.**

Superior infinite resources are those resources which, if nurtured and extracted to its full potential, can be considered to be in infinite supply. By definition, infinite resources are only limited by manager's and leadership's ability to exploit it to its fullest. The author;s self-designed list includes: Energy and Passion, Attitude & Balance, Self-worth & Self-responsibility, Motivation, Rewards & Recognition, Direction & Synergy, Creativity & Innovation, Flexibility/Responsiveness, Market-orientation , Quality, Ethics & Values, and Communication.

Finite resources are any and all resources that are limited by the capacity of the firm, the operating environment or simply by forces of nature such as: Data/Information; Time; Money; Technology; Assets, Capital, Patents; Human Capital; Alliances/Networks & Contracts. This distinction between finite and infinite resources is based on the a study of successful business leaders at the London School of Business (1999), which concluded that most exceptionally successful business people attribute their success to their possession of and focus on, optimizing the contribution of infinite resources, in contracts to popular belief that an abundance of finite resources may provide a "lucky few" with comparative advantage(s).

3.3.1 Superior Infinite Resources

"Business corporations reflect the attitudes of the people who run them " (Doyle and Hooley 1992). The author proposes that business reflect also, even if it is to a lesser extent, the attitudes, beliefs and values of the business agents who work in and for the firm. Although the premise of this study is that the exploitation and optimization for cost-benefit of all resources to a greater of lesser extent, plus the firm's ability to differentiate itself from its competitors, are the two means of ensuring SCA(s), the author considers the people who embody finite and infinite competencies/resources to be of greatest value, since all other sources and resources are mere tools and vehicles for the

thoughts and dreams of the individuals who execute the strategic and tactical plans. It can also be argued that cost and differential advantages can be realized when the infinite resources are present; and further, the more fine-tuned these infinite resources, the more likely it is that the contribution of finite resources will be optimized. The role of culture, motivation, innovation, and other infinites such as organizational culture has long been recognized by authors such as Alberts (989), Buzzell & Gale (1987), Hansen & Wernerfelt (1989) and Lado et al. (1992). In fact, it has been empirically shown that only 15 to 40% of a firm's performance can be attributed to economic factors, the rest is explained by factors such as managerial competencies and organizational climate or culture (Hansen & Wernerfelt 1989).

The following are two very important arguments to consider.
(1) As Day and Wensley (1988) point out with regards to all resources, superiority in infinite resources must translate into benefits desired by customers by reducing costs or by contributing to differential advantages for the firm. An example is that increased efficiency or self-drive of workers or work groups would lead to increased output and ultimately to lower costs. (2) Since by definition these resources are available to all firms in abundance, business will have to achieve some level of ambiguity over the factors responsible for this superiority or distinction to maintain some level of durability for advantage(s) gained (derived from Williamson 1985). Firms will have to consciously limit the imitability and transferability of their ability to optimize infinite resources. Constant review of methods and strategies, and reinvestment in existing and new ways to optimize infinite resources and build barriers to imitation or transfer, will be imperative to prevent the erosion of the competitive advantage(s) obtained through infinite resources.

Let's look at each concept (Energy and Passion, Attitude & Balance, Self-worth & Self-responsibility, Motivation, Rewards & Recognition, Direction &Synergy, Creativity & Innovation, Flexibility/Responsiveness, Market-orientation , Quality, Ethics & Values, Communication) under the construct of Infinite Resources, individually.

3.3.1.1 Energy, Passion, Attitude & Balance Self-worth, Self-drive & Self-responsibility

Although each of these sources could be dealt with - and probably deserves a special discussion - they are so intertwined and interdependent, that they will be dealt with as a unit. Furthermore, although these potential source of SCA has been taken from the fields of Human Resource Management (HRM) and psychology, the clever marketing practitioner will not ignore the role they can play in creating a superior enterprise and will therefore actively plan for and seek ways in which to activate and enhance positive energy and a positive attitude to the business of the firm, as well as to the role each individual agent and constituent plays in building and maintaining the success of the firm. The prudent marketer will search for partners in other business areas who will take responsibility - or at least co-responsibility - for this human-resource-related focus areas.

One does not have to read many journals and niche magazines on successful salesmanship to how highly rated personal and individual attitude and passion are to their own success and, therefore, collectively to the success of the firm. Robert Heller, author of *Achieving Excellence* (1999), defines drive, passion and energy as the ability to concentrate mental and physical powers; to be determined and persevering reaching goals; to devote drive and energy to planning and action and to react forcefully to failure and reinforce success.

Stephen R. Covey , the highly renowned author of *The Seven Habits of Highly Effective People* (1992); Dennis Waitley, author of *The Psychology of Winning* (1999); and Anthony Robbins (1997), author and TV personality, agree that self-confidence and self-esteem (and, therefore, developing them in employees from the business's perspective) are critical attributes to reaching for superior performance and, ultimately, durable success. In addition, Stephen Covey

dedicates an entire section of his book to his 7th habit, "Sharpening the Saw". He discusses ways for humans (as employees) to have balanced lifestyles, where physical, mental, social, spiritual and emotional needs can be met, refreshed and renewed in order to optimize time spend on the previous six habits; which have to do with setting goals, finding ways to achieve them in an independent and interdependent fashion and generally achieving success in life and in one's chosen career.

In building further from the field of Human Resource Management (HRM) and psychology, Dickson (1992) confirms that organizations that encourage the self-improvement drive and reward learning and creativity are more likely to (a) attract self-driven employees and (b) develop as sense of shared learning and responsibility for the success (or failure) of the business. Managers who create a sense of urgency in improving information systems and promote a sensitivity to market changes and the individual's responsibility to alert the business and find solutions to market challenges, are far more likely to succeed than those who don't. Bill Gates, CEO and founder of Microsoft, mentioned "fundamental curiosity" and "honest, ethical and hard-working" as two of the 10 top-most qualities he looks for in the best and brightest employees. To unlock the true potential of each human resource, marketing practitioners will do well to search for superior and distinctive ways in which to enhance the natural energy, passion, confidence and self-drive of *all* employees of the firm or at least to act as catalyst in this regard.

3.3.1.2 Balance

Although balance is infinitely available to all who seek it - "when you need it, you have access to it" - balancing all the activities, goals, resource allocations and responsibilities of the business seem to be very difficult for most businesses to achieve. Robert Kaplan and David Norton (1997) designed the balanced-

scorecard (BS) framework, which could assist firms to make potential sources of competitive advantage more tangible. Theirs is a systematic approach that translates the firm's strategy into objectives, measures, targets and initiatives. The emphasis of their system is that the business will find ways in which to focus on, monitor and control, report and rate all firm activities and the conformance (or non-conformance) of business units within the firm to the business's focus in 4 areas: (1) customer satisfaction, (2) internal financial performance, (3) internal business processes and (4) learning and growth. Each business is responsible to define its own "balance" and to measure the ability of all resources to work. There will be many scorecards for an organization; in fact each strategic business unit will/should have its own set of scorecards. "The BS is a performance measurement and reporting system that strikes a balance between financial and operating measures, links performance rewards and gives explicit recognition to the diversity of the organizational goals" (Horngren et al. 1999).

The effort to measure and control all activities should align the business's finite and infinite resources to its vision and goals and should lead to increased synergy. Further, the balance referred to in this chapter also highlights the need for all four elements to be monitored, controlled, and actively pursued for the business to be healthy and to use balance as a source of competitive advantage. How sustainable is this source? Since balance is very firm specific and directly related to the vision, goals, resources and daily activities of the firm, it is as durable as those variables are complex, immobile, non-replicable and not transferable.

3.3.1.3 Selection, Motivation, Rewards & Recognition

Modern human resource specialists seem to propose that motivated employees are hard to come by and that their motivation is almost solely their own doing or being. This author finds this view too narrow and too restrictive. It is obviously so that employee motivation is not totally within the control and influence of management, but opportunities to heighten employee motivation through a variety

of ways exist and if missed, may rob the business of taking advantage of the abilities and capabilities of their agents to the fullest, thereby limiting their access to this source of SCA. The author acknowledges, however, that different employees will be affected differently by any and all proposed motivational efforts and that not all methods will motivate uniquely endowed employees in the same way. Similarly a suggested method may affect the same way. Similarly, a suggested method may affect the same employee in different ways at different times; under different conditions, needs, moods, personal goals; and at different career points (Grant, 1990).

A large bank of literature exists concerning employee motivation, but this discussion will be limited to the following principles discussed at length in Philip Grant's book *The effort-Net Return Model of Employee Motivation.*

1. Employees will be motivated when they perceive effort leads to performance,
2. Employees will be motivated when they perceive performance leads to rewards,
3. Employees will be motivated when they perceive a Performance-supportive cost structure, and
4. Employees will be motivated when they perceive little attraction from competitive goal and reward systems.

So why do competitive businesses need/want motivated employees? Several studies examine (a) the productivity gains, (b) reduced acquisition and retention costs of staff, and (c) increased job effectiveness through selecting, motivating and rewarding staff appropriately. (Boudreau 1979; Grant 1990; Hunter et al. 1983; Kernis 1995; Lawler 1995; Schmidt 1984; Schmidt et al. 1979). These results have obvious implications on financial and market performance measures, which in turn, measures the success of a business.

Peter Dickson (1992) points out that selecting appropriate and task-structured rewards which relate to *rate of improvement* in performance rather than to the level of performance will attract and motive people that are never satisfied with stagnating or the status quo. He concludes his study on competitive efficiency by pointing out that high-performing businesses have a strong competitive drive that depends on personal motivation, "which in turn depends on personality, the reward system and the leadership and encouragement provided by supervisors." He suggests three implications for management: (1) to encourage a self-improvement drive in all levels of staff with incentive progammes that support this philosophy, (2) a "clan culture" (first suggested by Ouchi 1979), which nurtures shared learning a team work, and (3) rewards for individual employees for insights and ideas that lead to innovations or cost savings; with group profit sharing to encourage interdependence and efficient implementation.

3.3.1.4 Direction, Goals & Synergy

The author support the view of Hambrick et al. (1987) and Shrivastava and Nachman (1989) that managers are responsible for the development of and overall sense of direction and purpose of the business enterprise, and they guide the integration of strategy and implementation in the organization. The ability or inability of managers to offer all agents a sense of contribution, thus contributing to their sense of self-worth and ultimately to their energy and passion, will therefore, either contribute or detract from the contribution of these potential sources of SCA. All of the businesses' efforts need to be harnessed and coordinated in order to facilitate the achievement of preferred positioning, distinctive competencies and superior resources – with one ultimate goal: to offer value or perceived value to all potential and existing customers. This brings us once again to the conclusion of the importance of managerial competencies and strategic leadership as a potential source of SCA.

In the article "Strategic Intent," Hamel and Prahalad (1989) frames the phrase "strategic intent." This refers to a company's vision of a desired leadership position and leadership-established criteria the organization will use to chart its progress. They are quick to add, though, that strategic intent must also be more than simple ambition. "The concept also encompasses and active management process that includes: focusing the organization's attention on the essence of winning; motivating people by communicating the value of the target; leaving room for individual and team contributions; sustaining enthusiasm by providing new operational definitions as circumstances change; and using intent consistently to guide resources allocations." In terms of our focus at this time, an important addition is "Strategic intent sets targets that deserves personal effort and commitment."

In the field of HRM, David Terpstra (1994) provides conclusive evidence that organizations that employed the principles of goal setting, "reported median improvement in worker performance of 16 percent." Some other studies found goal-setting improved productivity with up to 95%. (Locke et al. 1980; Katzell & Guzzo 1983). Not only does goal-setting and goal-directed behavior increases productivity, but with increased feedback come increased effort and goal achievement as well. "Goal-setting applications are based on solid principles of motivation theory and the empirical evidence indicates that they work for many organizations" (Terpstra, 1994)

3.3.1.5 Creativity & Innovation

As the size and intensity of global competitiveness increases, so will businesses' search for new ways to identify new prospects, access existing and new markets and finding new means to achieve sustainable competitive advantages(s). Japanese product innovation strategies have enjoyed much attention and gained popularity in recent years (Flynn, 1994). "Total quality management (TQM) and "just in time" (JIT) concepts have been bandied about in the last few decades.

What these leading concepts have in common, is the ability of the firm to generate creative new ways in which to use core and auxiliary competencies to increase positive rent.

In an aggressive and increasingly sophisticated marketplace, firms will need to embrace business reinvention, in order to hold their own. "Business reinvention will help firms improve total customer profitability, achieve sustainable growth and bolster shareholder value. A 4-step process is crucial to the success of any reinvention initiative. The process requires firms to understand the forces that drive market changes and be prepared to act on them; identify all potential members of the value chain, to identify needs, competences and weaknesses, and rectify any deficiencies, and finally achieve competitive advantage by envisaging and selecting new winning combinations." Four approaches are (1) reconfiguring the value chain, (2) channel innovation, (3) leveraging information and technology, and (4) product or value innovation (MCB Univ Press 1996).

In a study of 30 companies that had survived for more than 75 years, Shell Oil discovered that more than anything else, these companies' leaders had the ability to learn about changing marketplaces (De Geus, 1988). They were able to change their business models of consumer and competitor behavior and of their own businesses much more quickly than their competitors. Fast insight into marketplace changes gave them more lead time for innovation and imitation and, most importantly, for avoiding waste in crisis management. De Geus (1988) professes that manager's ability to learn faster and adapt more quickly than their competitors may be the "only (sustainable) competitive advantage the company of the future will have".

Although we have just referred to the insight, attitude and orientation of leadership, a culture of innovation and creativity must flow through and inspire the way of working for **all staff** (Peter Drucker 1985). All systems, processes, reward structures and development forums should consciously and actively assist

in developing the mindset to question and build on the status quo in all levels of staff. According to Peter Dickson (1992), "firms that are more competitive have a stronger drive to improve their marketplace performance, are more sensitive to changes in the environment, and have superior implementation skills. This drive to improve depends on personal motivations, which in turn depend on personality, the reward system, and the leadership and encouragement provided by superiors."

Innovation is often based on some form of "adapted" imitation. The effectiveness and value of innovation/imitations often depends on accuracy of information and analysis of a firms' competitive environment, plus the competitive alertness and responsiveness of a firm (Dickson 1992). This brings us to the issue of responsiveness.

3.3.1.6 Flexibility/Responsiveness/Managing Change

Many researchers point out the importance of (a) sound market and competitor information and (b) the ability of a firm to coordinate the flows of information, to their responsiveness and flexibility (Drucker 1954; Eisenhardt and Brown 1998; Hayes and Wheelright 1984; MCB University Press 1996; Simon 1976). Dickson (1993) captures their sentiment: " The formal and informal flows of information within the organization are also critical determinants of the competitive alertness of a firm." The adept market practitioner and business leader will therefore invest effort in encouraging all agents and constituents to make use of readily available information and to openly share skills, knowledge and experience. "It *(the firm)* might also invest in training that encourages and open-minded use of readily available information" (Russo & Schoemaker, 1989).

The ability to react fast and timeously, is of obvious importance in a highly competitive marketplace with savvy customers and more demanding constituents. (Dickson 1992) Since most businesses cannot predict or plan for changing buyer behavior and discontinuities in competitor actions and strategies, (a) the open-

minded market expertise of staff and (b) their responsiveness to shifts and threats of shifts are of utmost importance and a critical source of CA. This responsiveness and alertness may be compromised, affecting the durability of the CA, should a high enough proportion of resources not be spent on organizational learning and on continuous and accurate information gathering processes.

Hayes and Wheelright (1984) points out that unbalanced expenditure of intellectual and monetary resources on opportunistic profit-seeking methods, such as tax minimization by finding loopholes, restructuring of current assets and exploiting information about property and shares markets, may take critically needed limited resources away from areas such as marketing, research and development, and product and technological expertise. This will make the firm less alert, less responsive and ultimately less competitive in the marketplace. In an empirical study by Doyle and Wong (1997), there was a statistically significant difference in performance at innovation between successful and non-successful companies. Successful companies tend to rate much higher on innovation in product development, service and distribution channel development; and it was further shown that these successful companies place much greater emphasis thatn others on learning about customers and their problems. "Staff were expected to be more pro-active in searching for new market opportunities and more comprehensive training programs were expected to be in place" (Doyle and Wong 1997).

The alertness to a deliberate, relentless, conscious search for competitor and customer need-changes and ways for the firm to address them, forges an explicit connection between competition, the marketing concept of serving the customer and the self-interest and rent-seeking interest of businesses. (For more details see Day and Wensley 1988; Dickson 1992).

3.3.1.7 Market Orientation

A large body of literature exists with regards to the role of market orientation in SCA. Studies can be traced back to the work of Day and Wensley (1988) and the earliest work of Kohli and Jaworski (1990). But more recently, almost any business article or academic study on competitive advantage(s) refers to or includes a section on the potential role of this **internal** resource which involves a understanding of and deliberate pursuit of meeting the challenges of the changing strategies and actions of competitors and needs of customers and constituents. (Narver and Slater 1990; 1995; Jaworski & Kohli 1990; 1993; 1996; Hunt and Morgan 1996).

Although not all authors provide the same conceptualization of the term, they share similar components: it defines an outward focus on customers and competitors. Kohli and Jaworski (1990) view market orientation as the implementation of the marketing concept as a process of (a) gathering and analyzing information on customer needs and wants, (b) sharing the information throughout the organization, and (c) responding with actions and tactics to meet customer's needs. Day (1994) focused on the increased ability of firms to react to customer's needs faster than competitors.

Narver & Slater (1990) highlights an important aspect of market orientation in viewing it as an organizational culture containing three behavioral components: (1) understanding the target market (customer orientation), (2) competitor orientation (SWOT of key competitors), and (3) inter-functional coordination (all departments contribute to the value-chain for targeted customers). The latter point is reiterated by a number of more recent articles (Doyle & Wong 1997; Garvin1995; Hunt & Morgan 1995; Varadarajan and Jayachandran 1999; Naver and Slater 1994; De Loitte and Touche 2000) which points toward the ability of firms to gain insights which could potentially provide them with differentiating and superior innovations or adaptations to current processes and strategies.

Since market orientation employs intangible resources such as informational and organizational resources, it can serve as a source of SCA (Hunt and Morgan 1995). As has been said many times before, the durability will depend on the rarity, imperfect imitability, immobility and ambiguity of the resource. So is market orientation rare? Hunt & Morgan (1995) answers this question in their article "The Comparative Advantage Theory of Competition" . They refer to two studies (Narver and Slater (1990); Jaworski and Kohli 1993) which confirm that it is indeed a rare both in commodity and non-commodity businesses and that "it is an important determinant of profitability". In their empirical study, Doyle and Wong (1997) postulates and proves beyond doubt that, "companies with a strong market orientation are much more likely to be high performers. *A market orientation is the route to building customer preference.* Not surprisingly, a market orientation was the second most important driver of performance [4]. In high performing companies marketing was seen as a total business philosophy rather than an activity undertaken by the marketing department" (italics added)

3.3.1.8 Quality/Company Reputation

" The global leadership skills of behavior complexity and stewardship development that contribute to corporate reputational capital are key intangible resources that leverage sustainable competitive advantage in the 21st century. Reputational capital is an important component of social capital that solidifies credibility, reliability, responsibility, trustworthiness and accountability." (Petrick et al. 1999). Petrick et al. identify four management practices for enhancing reputational capital and CA(s): (1) the provision of global leadership training at all levels of the global unit, (2) the creation of reputational oversight responsibilities for all executives, (3) conducting an annual global reputational audit and (4) competing for selected leadership awards and reputational rankings.

[4] The most important driver was possessing a differential advantage. See Doyle and Wong (1997) for details.

The first practice builds collective learning and knowledge at all levels. The second practice coordinates processes across functions to reduce strategic risk. The third management practice will allow the firm to pinpoint and prioritize focus areas for reputational improvement and enhancement, and the fourth contributes to a SCA in that it develops external benchmarking to counteract *hubris* or strategic arrogance.

3.3.1.9 Ethics & Values/Culture

Davis (1984) defines culture as: "the pattern of shared beliefs and values that give the members of an institution meaning and provide them with rules of behavior". In the author's opinion, culture can be considered a source of CA insofar it influences the processes and behavior of resources under the management and control of the enterprise, and only if those resources contributes to, or affect the value-chain and/or income. By definition, it guides the actions of all members of a firm, enabling it to drive resources in a systematic strategic direction (Meyer 1982; Reger et al. 1994).

Corporate culture also provides constituents with information against which to compare firms, allowing some cognitive structure for evaluations of the rent-earning potential, working conditions, etcetera of the firm as compared with its competitors. In this way, ethics and values effect the resource attraction and allocation to the firm. (For further information of the role of constituents see section 3.3.2 "Finite Resources".)

The sustainability of culture as a source of competitive advantage(s), depends on whether the pattern of shared beliefs and values are valuable, rare and difficult to imitate (Spender 1993; Barney 1986; Fiol 1991).

3.3.1.10 Coordination and Communication

Businesses are often segregated into many functional areas, and even totally diverse competency areas. Leyland Pitt (1999) calls their inability to communicate successfully and their inability to focus on common goals, the "silo effect". This may lead to a lack of co-ordination and even to interdepartmental competition and conflict. This type of culture will obviously limit synergy and sharing of scarce resources, thereby not allowing the business to fully exploit its core competencies, and in affect negating the possibility of a SCA through infinite resources (Petrick et al. 1999; Finkelstein and Hambrick 1996). "Core competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies. It is about harmonizing streams of technology, it is about the organization of work and the delivery of value." (Prahalad & Hamel, 1992) Although there are more and more communication and project management tools available to all enterprises, communication seems too difficult to achieve and more difficult to optimize. "Core competence is communication, involvement and a deep commitment to working across organizational boundaries." (Prahalad and Hamel 1992) In line with the thinking of Prahalad and Hamel, and other scholars, we conclude that businesses which are adept at finding ways to promote shared competencies and ways to coordinate the efforts of all resources - finite and infinite - are more likely to achieve a SCA, than those less harmonized. "Unlike physical assets, competencies do not deteriorate as they are applied and shared. They grow. " (Prahalad and Hamel 1990)

As seen in section 3.3.1.7 on *Market Orientation,* unhindered and continued flow of information to and from all departments, and inter-departmental cooperation and willingness to share skills, knowledge and insights, will provide the business with greater potential to generate differential advantages and solve complicated problems that span across functional areas. The likelihood that learning will

occur is increased, and leveraging this knowledge to generate an effective response to market changes is far more likely (Doyle and Wong 1997).

3.3.2 FINITE RESOURCES

3.3.2.1 Data/Information Management

There are very few, if any, managers who would underestimate the strategic significance of data/information management in the toolbox of those astute intrapreneurs and entrepreneur. Michael Porter and Victor Millar (1985) have already shared their opinion on the matter in the following statements. " The information revolution is sweeping through our economy. No company can escape its effects. Dramatic reductions in the cost of obtaining, processing and transmitting information are changing the way we do business." Later in their article "How information gives you competitive advantage", they add, "In any company, information technology has a powerful effect on competitive advantage in either cost or differentiation. The technology affects value activities themselves or allows companies to gain competitive advantage by exploiting changes in competitive scope". In the same article, the authors list five steps executives can follow to take advantage of opportunities and possibilities created by the information revolution. Right at the outset of the study, they also list the three ways in which the information revolution is affecting competition: (1) by changing the industry structure and altering the rules of competition, (2) by creating competitive advantages by offering firms new ways to outperform rivals, and (3) by allowing new businesses to grow, often from within the firm's existing businesses.

Each and every activity that forms part of the value chain (Porter 1985) performed within a business affect its financial and market performance in one way or another. Each action and decision within the value chain is, or should be, based on information. Either one, or some or *all* of the following information-

management activities is required at each step in the production or value-creation chain of the firm: capturing, manipulation, storage, analysis or implementation of data and information. The significance of information acquisition and processing should, therefore, be clear to all marketing practitioners and senior managers. Similarly, it should be clear that the integrity of the data is imperative for qualified and sound decision-making at all levels of the business.

Porter & Millar (1985) are quick to emphasize that information and IT do not only affect individual value-chain activities, but also enhance the "firm's ability to exploit linkages between activities, both inside and outside the company." In addition to the internal linkages, IT affects competitive scope, in that it allows the coordination of value-activities in distant areas as well as among business allies. This new capacity and access to skills and knowledge will not only lead to new alliances may even lead to spawning new businesses. Companies can sell information they own or even information that is a by-product of their business operations. In a similar manner, information access may lead businesses to spawn "derived demand" businesses. Information about market needs and knowledge of capabilities and competencies could be combined to point the astute business leader toward new sources of SCA in either cost reduction or differentiation.

Obviously not all information is good information, and lots of money could be wasted on acquiring, capturing, manipulating, analyzing or storing useless information. It is, therefore, important to measure the value of information. (A detailed discussion on this matter can be found in Glazer (1991) and Parker and Benson (1988).)

3.3.2.2 Time Management

Most readers are certain to agree that time has played and will keep on playing a major role in the success or failure of many enterprises. Time relates to the "when" of marketing strategies, tactics and campaigns. Issues such as the

seasonality of marketing campaigns, product life cycle and industry life cycle, market trends and product fads, cyclicity of some outputs, and, perhaps most measurably productivity, affects the competitiveness and SCA of an enterprise.

Further, the Law of Leadership and Timing (Ries and Trout 91994), will affect the way in which the market, especially early adopters and laggards, see a firm's outputs. Being the first (timing) in an industry sector or category will provide that market player with CA(s) that followers will not have. Their ability to sustain that advantage, though, will depend on a combination of and/or the specific application of a number of the other factors discussed in this paper by each individual business.

"The best competitors, the most successful ones, know how to stay on the cutting edge. Today, time is the cutting edge. The way leading companies manage time – in production, in new product development and introduction, in sales and distribution – represent the most powerful new source of competitive advantage" (Stalk, 1988). Although this quote is from an article written in the previous century, it is still true. The importance of sound time-management principles to the business is increasing. In fact, a video report by Kenneth Balding (1998) states that the rate of change is accelerating at an exponential rate, and that companies' ability to adapt to and react to marketplace changes and their ability to manage time will be imperative to their success and maybe even to their survival.

Earlier time-management practices focused on achieving high levels of productivity, thus lowering production costs and providing companies with a cost-based advantage. Japanese (and other) companies have added new dimensions to time-management, which also address the second competitive-distinction factor, differentiation. In most firms, costs fall into two categories: volume- or scale-related costs and cost affected by variety of offering . The sum of these two costs, represents the total cost of production or manufacturing. In order to reduce cost

or to differentiate the firm, both these costs need to be driven down.

Japanese manufacturers were the first to develop ways in which to achieve both at the same time - the flexible factory (Stalk1988). In this type of system, variety costs start lower and increase more slowly as variety grows, than in traditional manufacturing systems. Most of this is achieve through structurally different methods rather than clever long-term pro-action or massive reactive spending. The structural changes enabled their operations to execute their processes much more quickly. Traditional companies normally measured time as a basic performance variable and seldom with the same accuracy as recording sales and other costs.

New-generation companies compete by expanding variety and increasing innovation, through rapid-response systems and close customer orientation. These companies focus limited resources on reducing and eliminating delays and using their response advantages to attract the most profitable customers. Time, therefore, has become the yardstick of performance and a new source of competitive advantage. The elimination of delays does not only affect the production/manufacturing arena, but also planning, information gathering and distribution, sales and distribution and, ultimately, innovation.

In production, time delays are minimized by reducing run lengths, optimizing factory layout, minimizing handling, reducing parts idle time, increased shop-floor decision-making, reducing the time-consuming loop back to management for approval. (Stalk, 1988). In sales and distribution delays are cut to a minimum and customer service improved. With regards to time-based innovation: "A company that can bring out new products three times faster than its competitors enjoys a huge advantage. While the traditional companies track costs and size, the new competitor derives advantage from the time, staying on the cutting edge, leaving its rivals behind." (Stalk, 1988).

3.3.2.3 Constituents & Stakeholders

Most researchers focus theories of competitive advantage on the internal environment and the effect of competitive interactions of rivals. We argue, consistent with the stakeholder theory of Freeman (1984), that stakeholders or constituents have a very influential role to play in the creation and maintenance of CA. Business leaders and marketing practitioners should therefore focus some of their energies and resources on winning favorable interpretations from the group of constituents and intermediaries. They should, in addition to this, consciously seek ways to influence the way in which important constituents and groups of constituents develop industry paradigms – "shared understandings among constituents about how firms in an industry create value" - and how they define success (Rindova and Fombrun 1999)

This study shares the view of Rindova & Fombrun (1999), that businesses and their constituents jointly shapes and constructs the environment within which they compete and operate. They argue that the way in which constituents interact with and interpret the contribution of a business to the marketplace, will affect decisions constituents make, which will affect availability and use of resources as well as the CA that a firm will enjoy in the marketplace. Further, firms are each other's competitors as and when they compete for the attention and the approval of the same constituents and the resources they control.

The influence of constituents on the competitive position of the firm needs to be viewed from the interactions between the firm and its constituents (Rindova and Fombrun 1999). Interpretations of the firms and it's perceived success or failure with regards to issues such as value-creator, legitimate community player, the firm's effects on the environment and other reputational rankings, will affect the way constituents (a) make direct statements about the success of the firm and (b) allocate resources in the form of buying and selling decisions, investment decisions and employment decisions. The assessment of success or failure is not

only based on the constituents' own unique definitions of success and how the firm ranks relative to meeting their expectations (Rindova and Fombrun 1999), but also on limited and often second-hand; that is, via the media or specialized organizations. (Abrahamson and Fombrun 1992).

These assessments are not only difficult to control and direct from the view of the firm, but also affect the macro-environment within which the firm operates, often changing the rules of the game and sometimes even the playing field. (Reger and Huff 1993). Constituents will observe, interpret, and exchange information and even take collective action to influence firms (Hill and Jones 1992). They will "categorize competing firms into strategic groups, rank-ordering them in reputational rankings and even feature them as exemplars" (Rindova and Fombrun 1999) in the media or by word of mouth. This will affect the way in which they themselves and other stakeholders channel their limited resources. Resources are normally channeled to favored firms, thereby creating changes in market conditions and, as a vicious circle, affect the resources the firm will have access to.

3.3.2.4 Strategic Investments & Projections

Much research has been done and reported about firm's investment in property, equipment, and intellectual property to build competitive advantage through new-product development, increased constituent communication, improved distribution channels or production quality and capability; and the impact of decisions in this regard on the financial and market performance of the business. (Caves and Porter 1977; Kim and Mauborgne 1997; Penrose 1959; Porter 1980; Rumelt et al. 1991). A firm will only invest in capital, assets and resources, if it can create opportunities for earning positive rent (Rumelt et al. 1991) and/or provide the firm with "a more favorable configuration of industry factors" (Porter 1980). Firms use investments to obtain favorable configurations of industry and competitive factors; then they use further investments to protect their attained CA

or favorable position from competitors (Caves and Porter 1977; Porter 1980). Penrose (1959) points out that (a) resources available to a firm, and (b) top manager's interpretation of its uses and productiveness in earning rent, drive strategic investments. The accuracy of this interpretation or the correctness of business leaders' analysis of trends and consumer behavior shifts will play a large role in whether or not the investment will bear fruits and contribute to a (sustainable) CA. Thus, strategic investment as a source of CA originates from the firm's resource base, its culture, and leadership's access to accurate consumer and competitor information.

The growth of the investment obviously contributes to the growth in value of investment capital and access to improved finite resources such as money, production capacity, human talent. But, of equal importance is the contribution it makes to the perception of increased value for specific resource-holders and constituents. Satisfying needs and creating/or highlighting new needs can create value. "By making investment choices about customer groups, product functions and the resources and technologies necessary to serve them, a firm satisfies its constituents, as well as defines its business and its competitors" (Abell 1980; Rindova and Fombrun 1999). In this way, the firm's decisions about strategic investments have an impact, not only on the investing firm, but also on the different competitors in an industry. Again, the imitability of investment decisions will affect the sustainability of such actions, and the transparency will affect the way in which the marketplace reacts to the strategic investments of a firms or group of firms in an industry (Lippman and Rumelt 1982).

The full benefits of strategic investments can only by realized if their value and contribution is apparent to stakeholders and constituents. Firms can enhance the favorable impression constituents have about the firm's investments, and their interpretation of future value, by using strategic projections. A variety of methods can be used, including press releases and media exposure, advertising, financial and annual reports, prospectuses. According to Rindova and Fombrun (1999),

firms achieve these 3 objectives through strategic projections: (1) provide information constituents will use to make decisions, (2) offer constituents ready-made analysis and interpretations of investments, and (3) create favorable perceptions and impress desirable symbols and associations on the minds of constituents. As inadequate investments will undermine a business's CA, inadequate projections will too. Misrepresented or inaccurate representations of strategic projections are not only illegal, but will ultimately destroy the firm's reputation and credibility, and finally its rent-earning ability (Fombrun, 1996).

4. CONCLUSION

A sustainable competitive advantage is a highly sought-after business imperative for businesses with a long-term view. To identify sources of SCA(s) in a highly competitive global marketplace is a grueling challenge for most marketing practitioners. In nearly all cases though, SCA(s) should result in either point(s) of differentiation or price advantage(s) that is(are) valued by the customer.

This chapter further points out in several different discussions that finding ways to attain and maintain CA(s) will be assisted in almost all cases, by doing a thorough analysis of customer motivation or needs, the value-chain of the business, the business's vision and goals and its industry competitors. Although many sources exist, not all sources will provide similar benefits. As brilliant as a strategy may be for one business, it will not necessarily work well for another. This is because every company works in a different context and has fundamentally different competencies, resources and a market positioning. There is unfortunately no easy recipe or formula for SCA – not even for a specific industry segment.

"Like competition itself, competitive advantage is a constantly moving target. For any company in any industry, the key is not to get stuck with a single simple notion of its source of advantage" (Stalk 1988). Although there are many potential ways to succeed,

and an unlimited combination of sources of CA, many strategies are not effective or even feasible. Sometimes an objective and thorough analysis will conclude that the development of a preferred positioning, superior capability or superior resources is so costly that it is not feasible for the business to pursue. Sometimes the marketplace is so entrenched with the status quo, that the suggested or researched change will not be credible and therefore not be feasible to implement. The last barrier to SCA(s) is an internal implementation issue. If the culture, people, systems, incentives and production capabilities are not geared to the change, such a change may cause substantial harm (Aaker, 1989) and may, therefore, be best not to pursue or implement.

The author trusts that the Competitive Advantage Wheel, which is presented in Chapter 3 and 4, and the model described in this chapter will provide a range of options and possible strategies that will be a useful starting point for developing or benchmarking the marketing strategy of a business.

"There are many ways to succeed. Creativity and intuition are hallmarks of great corporate strategies. So too, however, are discipline and rigor. Brilliant strategies begin with good ideas. These are followed by deliberate investments in resources made over many years, the development of clear understanding of the businesses in which those resources would be valuable, and the painstaking tailoring of organizations to make the strategy a reality. Ultimately strategies that prevail are well-constructed systems that deliver tangible benefits" (Collis and Montgomery 1998). May this study provide the reader with the inspiration to tailor strategy to reality and a tool to help work down some rough edges to existing plans.

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.

CHAPTER 4

DISCUSSION OF THE RESEARCH RESULTS

1. INTRODUCTION

The objective of this chapter is to discuss the research results and establish the basis for the final conclusions and hypotheses for future research.

This chapter is structured in three sections:

Part 1: Descriptive analysis

Part 2: Questionnaire Analysis

Part 3: Conclusion

The discussion of the descriptive analysis follows.

2. PART 1: DESCRIPTIVE ANALYSIS

2.1 COMPOSITION OF THE SAMPLE

To obtain a sample of experienced and strategically knowledgeable, and currently employed executives, the researcher selected a group of 60 Executive MBA students of the Red McCombs School of Business of the University of Texas at Austin, USA. This business school is recognized as one of the top 20 in the United States of America, and therefore draws some of the best students and offers some of the best programmes available in the world. The Executive MBA programme is presented in a modular fashion, so students remain in their current functional employment positions, while completing the MBA programme.

Initial contact was through the faculty members responsible for Marketing and Business Leadership. A total of 59 completed questionnaires were received. Only 57 of the

responses could be used for analysis, since two respondents did not complete the classification details, rendering them useless.

For the purposes of this analysis the responses were averaged to obtain an overall respondent score for each of three categories:

1. Overall business experience
2. Industry category
3. Marketing experience.

There were three motivations for the averaging and categorizing. First, as discussed later in this chapter, in many instances there were no statistically significant differences in the *pattern* of responses between different members of certain industry or experience categories. Second, management perceptions are known to be subject to error and a number of researchers have found that averaging across functions improves the accuracy of the data. (Starbuck and Mezias 1996). Third, the questionnaire was designed with the conscious attempt to compare prompted and unprompted results for a number of sections, and over all of the respondents. In order to make the resulting data more manageable, the number of entries could be reduced, making the comparisons more user-friendly and easier for the reader/user to interpret.

Table 4.1 below sets out the classification details, reflecting the composition of the sample group. Since all respondents were MBA students in their first year of a two-year study programme, the degree programme and year of study will not be reflected in the table.

Table 4 .1 Composition of the sample

	Category	Number of Respondents	Participants by Category (%)
AGE	21-34	26	45.6
	35+	31	54.3
GENDER	Male	52	91.2
	Female	5	8.8
WORK EXPERIENCE	≥15 Years	14	24.6
	10-14 years	21	36.8
	< 10 years	22	38.6
MARKETING EXPERIENCE	≥ 3 Years	15	26.3
	< 3 Years	42	73.7
INDUSTRY CATEGORY	Science & Chemical	6	10.5
	Energy	7	12.3
	Industrial and Manufacturing	5	8.8
	Oil, Gas & Petrochemical	5	8.8
	Technology & IT	17	29.8
	Services	14	24.5
	Other	3	5.3

2.2 EXPERIENCE AND INDUSTRY CATEGORIES

2.2.1 Experience Categories

It was of great importance to the researcher to find experienced business executives, who have insight into marketing practices and principles as well as experience in strategic management and business leadership. Although not all details of work experience and specific business unit knowledge is known, the author is satisfied that experience is sufficient, both based on the results as shown in Table 4.1, and from the selection criteria of the Executive MBA Programme at the University of Texas. Seen in this light, the specific age of each respondent will be ignored in favor of the marketing, management and overall business

experience of the respondent. In similar vain, it is not the purpose of this study to determine the effect of gender–related issues and the impact on perceptions of managers due to gender issues, and therefore the huge difference (91%: 9%) in the size of the two gender groups, is seen as inconsequential.

The respondents are highly experienced, with more than 61% of respondents, reporting overall business experience of more than 10 years. The sample mean indicated an average experience level of 6.25 years. (See Appendix B for further details.) The author was initially concerned with the low level of marketing experience reported, but for the following reasons, placated that the research results would still be valid and reliable:

1. Respondents who reported less than 3 years marketing experience or experience as a marketing practitioner, also reported a sample mean of 6.09 years experience in management. (12 Respondent reported zero marketing experience.) Due to the selection process for this group of respondents, and the large component of Marketing subject matter included in this MBA Programme, the researcher is satisfied that a high level of understanding of the marketing terminology used in the questionnaire, has been achieved. Management experience would also, by its very nature, imply a certain level of marketing experience or interaction with marketing practitioners that would equip respondents with the required level of understanding of the concepts and constructs used in the questionnaire. Further, when the questionnaire was tested with a group of lower management and marketing experience no significant misunderstandings were detected.
2. The author initially hypothesized that a higher level of marketing experience might affect the responses and/or importance ratings with regards to marketing related business issues such as brand building and market-orientation, but this was not the case. There was very little difference in the results when respondents with a high level of overall

experience and respondents with a high level of marketing experience reported. (See section 3.3 and 3.4 for empirical proof.)

3. It is the researcher's perception that respondents interpreted the question to refer to employment in a pure marketing function or as a dedicated marketing practitioner, rather than a reflection of the level of marketing knowledge obtained. The researcher bases this assumption on the fact that a large number of respondents reporting low marketing experience, also indicated high levels of experience in the management of service firms such as law firms, engineering consulting firms and financial services. This, according to the author, implies a certain level interaction and direct dealings with suppliers and customers – i.e. marketing experience and know-how
4. Lastly, in most cases that level of marketing experience is combined with or reported together with other indicators such as overall experience or number of years of management experience. In the case of industry references, respondents from industries such as agriculture, military services and science research, responses are placed in separate category, called "*Other*".

2.2.2 Industry Categories

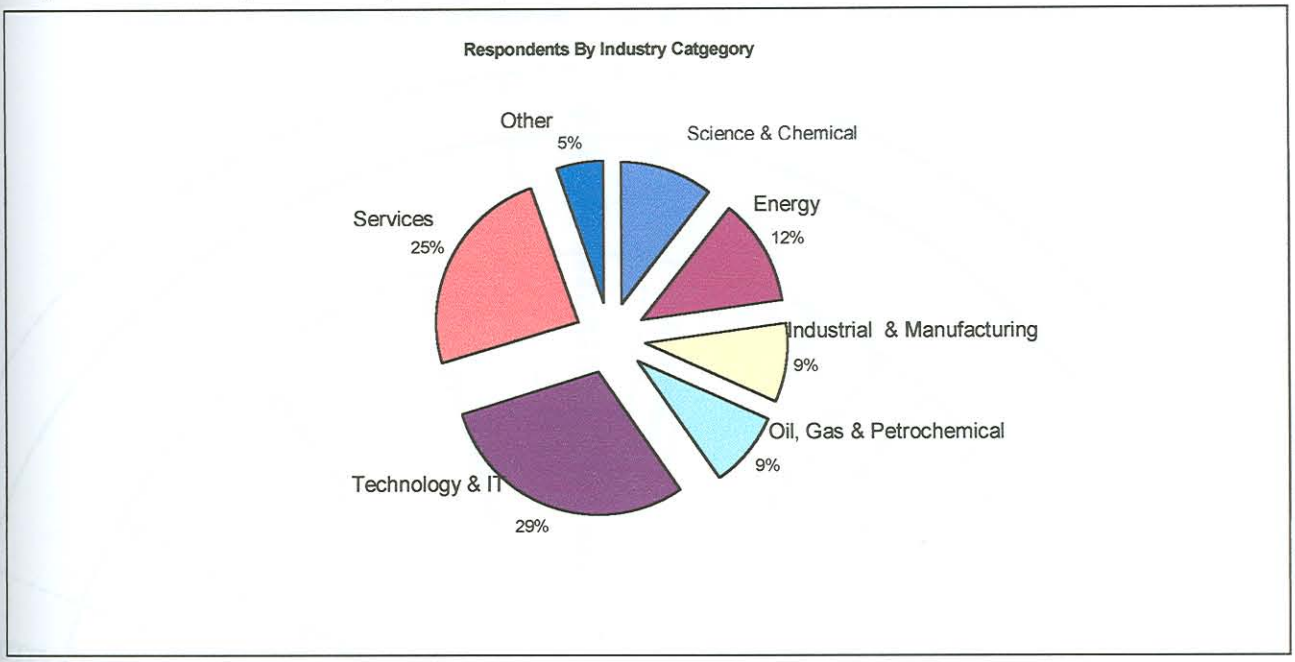
In an attempt to reduce the number of industry categories, from the original 28 different terms used, to a more manageable and meaningful number, the 57 responses were re-allocated into the following nine categories:

Agriculture,	Petrochemical & Oil,
Science & Chemistry,	Technology/IT/Electronics,
Energy,	Manufacturing,
Services,	Non-Profit, and US Military.

These categories were further reduced to 7, since there was only one respondent in each of the categories: Agriculture, Non-Profit and US Military. Also, since

these respondents do not fall into the categories of the specific products or services set out above, they were simply listed as *Other*.

Figure 4.1 Respondents by Industry Category



Respondents used more than 100 terms to identify possible sources of SCA. These concepts could all be categorized under the 20 constructs mentioned in the questions of section B and section C of the questionnaire. In most cases respondents would list more than one concept to represent one construct, e.g. market demand and market share. To compare the **unprompted** concepts with the **prompted** concepts in a meaningful manner, the unprompted concepts were first reassigned to the 42 factors listed in Table 4.2 below, and then further reduced to the 20 constructs (as set out in sections B and C of the questionnaire). Then the results of all sections of A, B and C were summarized under the 4 domains or main constructs, as defined in section D of the questionnaire, and tested in section E of the same questionnaire.

All concepts and constructs and the domains under which they finally resort, can be seen in the reduced graphical model of the SCA Wheel, below.

Figure 4.2 Sustainable Competitive Advantage Wheel and its Constructs

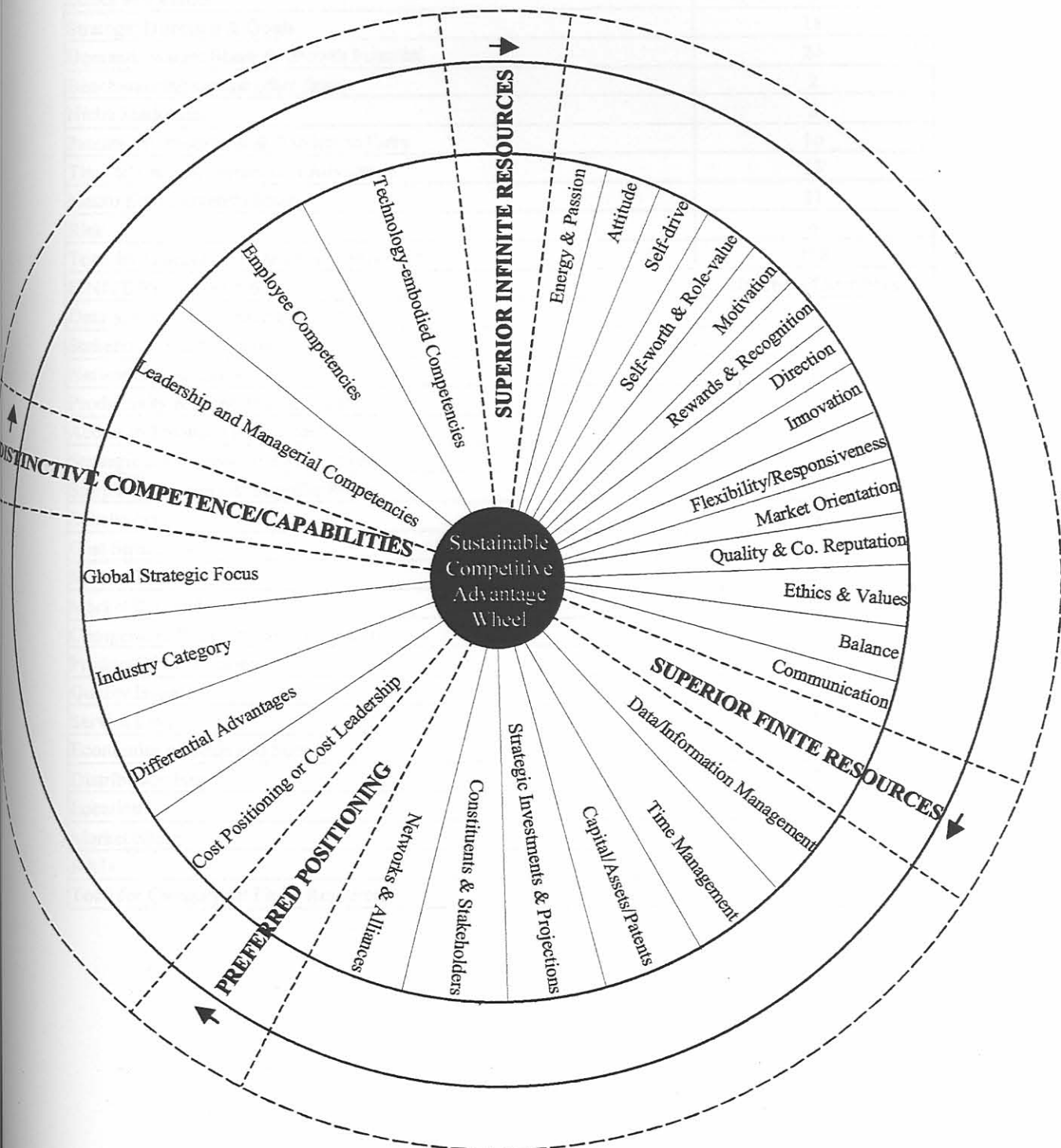


Table 4.2 Factors to create a SCA and their frequency of mention

CONCEPT METIONED BY RESPONDENT	Number of Mentions
PREFERRED POSITIONING	
Preferred Positioning i.t.o. Industry Category	4
Preferred Positioning i.t.o. Brand Image	13
Ethics and Values	0
Strategic Direction & Goals	18
Demand, Market Share & Growth Potential	24
Benchmarking against other firms	2
Niche Marketing	3
Patents, IP, Protection & Barriers to Entry	16
Time to Launch, Duration of Advantage	13
Macro Environmental Issues	11
Risk	4
Total for Category on Preferred Positioning	108
FINITE RESOURCES	Number of Mentions
Data & Information Management	0
Stakeholders & Constituents	0
Networks & Alliances	8
Productivity & Time Management	7
Access to Financial Resources	21
Strategic Investments and Projections	17
Supplier proximity & Supplier Power	12
Substitutes	4
Cost Structures	23
Market Trends	9
Market Research	10
Competitors & Competitive Reactions	20
Product Diversification	14
Quality Issues	13
Service Level	5
Economies of Scale and Scope	5
Distribution Issues	7
Location	2
Market Share	9
R&D	5
Total for Category on Finite Resources	299

INFINITE RESOURCES	Number of Mentions
Internal Communication & Co-ordination	3
Market & Competitive Orientation	25
Innovation & Creativity	9
Flexibility & Responsiveness	4
Motivation & Recognition	4
Attitude, Drive & Energy	2
Total for Category on Infinite Resources	47
CORE COMPETENCIES	Number of Mentions
Technology	6
Leadership Competencies	12
Core Competencies/Capabilities	31
Technology Embodied Competencies	1
Employee Competence & Buy-in	5
Total for Category on Competencies	55
TOTAL for ALL RESPONDENTS AND ALL SCA	509
SOURCES MENTIONED	

3. PART 2: QUESTIONNAIRE ANALYSIS

The questionnaire was divided into 5 sections, each with its own emphasis and design. First, the author will deal with the analysis of each section of the questionnaire as a separate unit; then the results of the sections will be compared in order to come to conclusions with regards to the difference between section A (unprompted responses) and sections B, C, D and E (prompted responses). Finally, further emphasis will be placed on the comparison between results from perceptions about the individual concepts, versus the concepts categorized into constructs and domains. (See Appendix A for a full copy of the questionnaire.)

This section of chapter 4 is divided into five distinct areas:

1. Section A1 and A2 of the questionnaire: Unprompted Responses; [Data and graphs in Appendix B]
2. Section B& C: Prompted Responses; [Data and graphs in Appendix C]

3. Section D: Ability Ratings of Prompted Responses
   [Data and graphs in Appendix D]
4. Section E: Priority Ratings of Prompted Domains
   [Data and graphs in Appendix E]
5. Comparison of Unprompted Responses and Prompted Responses
   [Data and graphs in Appendix F]

3.1 ARGUMENTS IN THE CONSIDERATION OF DIFFERENT DESCRIPTIVE ANALYSIS METHODOLOGIES

In an effort to, (a) raise as many sources of competitive advantage, (b) not influence responses unduly by the experience or literature review of the researcher and (c) get a sense of the top-of mind concepts and issues respondents would raise, two types of questions were asked. In question A, respondents could list any eight factors they would consider when doing future SCA planning. These responses were totally unprompted. In Question B and C, respondents were given a list of 20 possible sources of competitive advantage to first, select eight of the prompted sources of SCA, and then offer a priority rating between 1 and 10 to each of the 8 selected sources.

In order to test the effect of different analysis methods on the type of responses received, as well as the effect on the overall ranking of sources due to the different analysis methods, the researcher experimented with responses to question C (prompted responses). This specific question was selected due to the fact that the research is of a qualitative nature and the prompted responses would allow the researcher broad qualitative conclusions, which is in line with the overall focus of this study.

Two different analysis methodologies were used:

(A) The priority ranking of a source was determined by doing a rank ordering of the average priority ratings. This means that the priority ranking of a source is determined by taking the sum of all the ratings and dividing it by the number or mentions for the total sample.

(B) The second method is based on consideration of the inferred ranking given to the sources by each individual respondent. To get a priority ranking of the individual sources, the ratings per respondent was ranked. Since the respondents could, and often did, allocate a rating (of say 10) to more than one source, a system as illustrated by the table below, was used. The illustration below is based on accepting that an individual respondent's standard of rating will be consistent. In order to give recognition to the frequency of high ratings given by an individual respondent, a rank order was determined by allocating the same rank to a repeated rating followed by the next rank, depending on the number of times a specific rating recurred (see the last row in the rankings of respondent 2, below).

Table 4.3 Analysis methodology based on the inferred ranking by respondents

Source	Respondent 1		Respondent 2		Respondent 3		Respondent 4	
	Rating	Rank	Rating	Rank	Rating	Rank	Rating	Rank
C1	10	1	10	1	10	1	9	1
C2	10	1	10	1	10	1	8	2
C3	10	1	10	1	9	3	8	2
C4	10	1	10	1	9	3	7	4
C5	10	1	10	1	8	5	6	5
C6	10	1	10	1	7	6	5	6
C7	10	1	10	1	7	6	2	7
C8	10	1	8	8	7	6	2	7

(See Appendix C for more details of the derived rating.)

Table 4.4 below allows the researcher to see the impact of the two analysis methodologies clearly.

Table 4.4 Impact on the relative ranking due to the two analysis methodologies

No	Statement	Rank Order based on Analysis A	New Rank Order based on Analysis B
C17	Leadership Capabilities	**1**	**1**
C5	Market Orientation	**4**	**2**
C14	Strategic Investments	**3**	**3**
C18	People Embodied Skills	**5**	**4**
C9	Attitude	**2**	**5**
C6	Innovation	7	6
C13	Access to financial Resources	6	7
C19	Technological skills	12	8
C1	Preferred industry category	9	9
C3	Ethics and Values	14	10
C7	Direction and Goals	8	11
C12	Productivity	10	12
C15	Technological Resources	16	13
C2	Brand Equity	15	14
C20	Ability to Adapt/Flexibility	13	15
C16	Data and Information Management Skills	11	16
C10	Stakeholders and Influencers	**18**	**17**
C11	Alliances and Networks	**19**	**18**
C4	Internal Communication	**17**	**19**
C8	Motivation of Staff	**20**	**20**

Using analysis methodology A, as discussed above, the following sources appear in the top 5 ranked positions:

1 *Leadership Capabilities and Skills*
2 *Staff Attitude*
3 *Strategic Investments and Projections*
4 *Marketing and Competitive Orientation of the business*
5 *People Embodied Competencies and Skills*

By re-evaluating the responses according to methodology B, described above, the following sources emerge as the top five prompted sources of SCA (in the correct order of preference)

1 *Leadership Capabilities and Skills*
2 *Marketing and Competitive Orientation*
3 *Strategic Investments and Projections*
4 *People Embodied Competencies and Skills*
5 *Staff/Personnel Attitude.*

Although the top rank order differs slightly for the two methods, the researcher is of the opinion that the impact is not significant, since the topmost ranked sources remains the same and the relative position in the overall list is relatively unchanged. A similar picture emerges for the lowest ranked sources. Note that the sources: Stakeholders and Influencers, Strategic Alliances, Internal Communication and lastly Motivation remains, in both cases, the four lowliest ranked sources of SCA for prompted responses.

Since both methods deliver results that are (a) very comparable and (b) the different analysis methodologies did not affect the broad qualitative trends, the researcher elected to use the first analysis method throughout the rest of this study. The main purpose of the study is to produce qualitative results, focusing on broad trends, rather than on empirical, factual results. The researcher therefore applied analysis methodology A as described above in the rest of the descriptive sample analysis described in this chapter.

Should the researcher purely consider the frequency of mentions of a certain source of SCA, the following five sources received the highest number of mentions:

- *Marketing and Customer Orientation* [39 mentions]
- *People Embodied Competencies and Skills* [37 mentions]
- *Leadership Competencies and Skills* [36 mentions]
- *Technology* [33 mentions]
- *Innovation and Creativity* [31 mentions].

(See Appendix C for graphical display)

It is interesting to note that the source *Staff Attitude* only received 19 mentions, but those respondents who did select this source, gave it an above-average high rating. The frequency of mentions for the four prompted sources of SCA, *Stakeholders and Influencers, Alliances and Networks, Internal Communication and Motivation*, was well below the average number of mentions of 22 for the sample group. (See Appendix for the number of mentions.) The least important source of *Motivation of Staff* (c8) only received four mentions, and those mentions had a low importance rating.

3.2 SECTION A1 AND A2: UNPROMPTED RESPONSES

Respondents were asked to list at least eight 8 factors they would consider when doing future planning to create SCA for their business or SBU. In question A2 they were asked to prioritize the factors listed. Since this was an open-ended question, no rating scale could be predetermined. Respondents were asked to rank their suggestions, using 1 as the most important factor and 8 as the least important factor. To compare these results with those of section B through E, where priority rankings were on a descending scale, the factors provided in question A were inverted and a score of between 0 (not mentioned) and 8 (highest priority ranking, i.e. the respondent had rated it as "1") was allocated. Each item was individually scored on this 9-point ranking scale.

In a large number of cases, respondents provided factors/sources that could be interpreted as the same or similar factors, for example, "government" and "law" or "patents" and "protection of intellectual property". In these cases the highest ranking was taken as the one representing the opinion of that respondent.

To reflect this relative importance of the concept, the number of times a certain concept (and later, construct) is mentioned, will also be reported, as well as the mode and the mean. Table 4.5 displays these results.

Table 4.5 Factors to create a SCA and their priority rating

CONCEPT METIONED BY RESPONDENT	Number of Mentions	Highest Importance Ranking	Median	Average Ranking	Overall Ranking of the Source
PREFERRED POSITIONING					
Preferred Positioning: Industry Category	4	2	2.5	**2.5**	1
Preferred Positioning: Brand Image	13	1	2.0	**3.3**	4
Ethics & Values	-	-	-	-	-
Strategic Direction & Goals	18	1	4.0	3.8	10
Demand, Market Share & Growth Potential	**24**	1	3.0	**3.4**	6
Benchmarking against Other Firms	2	3	5.0	5.0	29
Niche Marketing	3	4	4.0	5.0	29
Patents, IP, Protection & Barriers to Entry	16	1	3.0	3.8	10
Time to Launch, Duration of Advantage	13	1	5.0	3.5	7
Macro Environmental Issues	11	2	4.0	4.7	25
Risk	4	2	4.5	4.3	25
Total for Category on Preferred Positioning	108				
FINITE RESOURCES	Number of Mentions	Highest Ranking	Median	Average Ranking	Overall Ranking of the Source
Data & Information Management	-	-	-	-	-
Stakeholders & Constituents	-	-	-	-	-
Networks & Alliances	8	1	5.0	4.5	24
Productivity & Time Management	7	1	3.0	3.6	9
Access to Financial Resources	21	1	5.0	4.3	21
Strategic Investments and Projections	17	1	5.0	5.2	31
Supplier Proximity & Supplier Power	12	4	6.0	6.3	37
Substitutes	4	4	4.5	5.3	34
Cost Structures	**23**	1	4.0	4.1	17
Market Trends	9	2	4.0	4.2	18
Market Research	10	1	5.5	4.9	27
Competitors & Competitive Reactions	20	1	4.0	4.2	15
Product Diversification	14	2	5.0	4.9	27

Quality Issues	13	1	6.0	5.2	31
Service Level	5	3	6.0	5.2	31
Economies of Scale and Scope	5	1	3.0	3.8	10
Distribution Issues	7	2	6.0	5.4	35
Location	2	1	3.5	3.5	7
Market Share	9	1	4.0	4.3	21
R&D	5	1	3.0	4.0	15
Total for Category on Finite Resources	299				
INFINITE RESOURCES	Number of Mentions	Highest Ranking	Median	Average Ranking	Overall Ranking of the Source
Internal Communication & Co-ordination	3	2	5.0	4.7	25
Market & Competitive Orientation	25	1	3.0	3.8	10
Innovation & Creativity	9	2	4.0	4.2	18
Flexibility & Responsiveness	4	3	7.0	6.3	37
Motivation & Recognition	4	1	3.5	3.8	10
Attitude, Drive & Energy	2	1	3.0	3.0	2
Total for Category on Infinite Resources	47				
CORE COMPETENCIES	Number of Mentions	Highest Ranking	Median	Average Ranking	Overall Ranking of the Source
Technology	6	2	3.0	3.2	3
Leadership Competencies	12	1	3.0	3.3	4
Core Competencies/Capabilities	31	1	4.0	4.0	15
Technology Embodied Competencies	1	6	6.0	6.0	36
Employee Competence & Buy-in	5	6	7.0	6.8	39
Total for Category on Competencies	55				
TOTAL for ALL RESPONDENTS AND ALL SCA SOURCES MENTIONED	509				

By far the largest number of respondents (31 individual mentions) referred to issues with regards to competencies of staff, capabilities to deal with the suggested developments and the overall capabilities of their firm or business to implement the planned strategy, as important issues or *the* most important issue to be considered when designing strategic plans for the future SCA of their firm or SBU. Not only was it mentioned by a large number of respondents, but the highest ranking of 1, was given several times, leading to a sample mean of 4.0 and a median of 4.0. Second to Core Competencies, Market & Competitive Orientation received the largest number of references (25 in total).

Although fewer respondents mentioned it as an issue, it received a higher sample average of 3.8 and a median ranking of 3.0. Market demand and growth potential of the selected market received the highest mean ranking (3.4), although this factor received only the 3rd

largest number of mentions (24). Issues such as cost of production, levels of fixed and variable costs and cost: profit ratios resorted under the heading of Cost Structures in Table 4.2. It was mentioned twenty three (23) times as an important factor, received the highest possible ranking of 1 only a few times, and therefore had a sample mean of 4.1. The median importance ranking given to this factor was 4.0.

The ranking scale assigned to this question was designed in such a manner, that the lower the average sample rating, the higher the priority the issues received according to the respondents. Looking at the lowest average rating of 2.5, Preferred Positioning in terms of industry category has received lowest average ranking, making it the factor with the highest priority score of all factors. It is important to note though, that this factor received only 4 mentions. Seen in the light of the reasoning in paragraph 3.1 above, no further analysis is done.

Since the difference between the lowest averages are almost negligible, and to round the averages off to the nearest unit would bring all five sample averages down to 3, the following 5 factors also need serious consideration:
Preferred positioning in terms of brand image and reputation; Demand, Market Share and Growth Potential; Personnel Attitude, Commitment, Energy and Drive; Access to Technology and Leadership Competencies.

Table 4.6 Factors receiving the highest ranking

FACTOR MENTIONED BY RESPONDENT	Number of Mentions	Highest Rating	Median Rating	Average Rating	Overall Ranking
Preferred Positioning: Industry Category	4	2	2.5	2.5	**1**
Preferred Positioning: Brand Image	13	1	2.0	3.3	**4**
Demand, Market Share & Growth Potential	24	1	3.0	3.4	**6**
Attitude, Drive & Energy	2	1	3.0	3.0	**2**
Technology	6	2	3.0	3.2	**3**
Leadership Competencies	12	1	3.0	3.3	**4**

Should one re-assign the 42 unprompted issues listed by the respondents to the 4 defined domains (as set out in Section D and E of the questionnaire), it is interesting to note that the four most mentioned factors resorts under one each of the 4 domains; i.e. Preferred

Positioning (PP), Superior Finite Resources (FR) Superior Infinite Resources (IR), and Superior Competencies and Capabilities (CC).

Should one purely consider frequency of mention, Table 4.7 below reflects the top 5 most frequently mentioned unprompted sources of SCA:

Table 4.7 ***Frequency of mention of unprompted sources of SCA***

Sources of Sustainable Competitive Advantage	**Number of Mentions**
Core Competencies	31
Market and Competitor Orientation	25
Demand, Market Size, Growth Potential	24
Cost Structures	23
Access to Financial Resources	21

Factors with the highest average ranking fall under the domain of Preferred Positioning. Should the top six average rankings be considered, the only domain not represented by any factor, is that of Superior Finite Resources (FR). Detailed analysis of the Finite Resources domain shows, however, that in total, by far the largest number of single mentions of sources, resorted under this domain. It can be deduced that, although access to superior finite resources is of serious concern to the respondents and certainly needs consideration when planning for SCA, factors resorting under Superior Finite Resources (FR) are not as important as those falling under the domains of Preferred Positioning (PP), Superior Infinite Resources (IR), and Superior Competencies and Capabilities (CC).

Selecting only those factors that received the highest priority ranking (1; the lowest is 8) and an average ranking of less than or equal to 4, the top 14 factors emerged. These are listed in Table 4.8 with their number of mentions and their highest, median, and average ratings. Since these factors are also mostly mentioned by a large number of respondents, the author is satisfied that these factors are indeed the most important top-of-mind sources of SCA for the respondents.

Table 4.8 Factors with a ranking of 1 and a sample average ranking of ≤ 4

CONCEPT METIONED BY RESPONDENT	Number of Mentions	Highest Ranking	Median Ranking	Average Ranking
Preferred Market Positioning (PP)				
Preferred Positioning: Brand Image	13	1	2.0	3.3
Strategic Direction & Goals	18	1	4.0	3.8
Demand, Market Share & Growth Potential	24	1	3.0	3.4
Patents, IP, Protection & Barriers to Entry	16	1	3.0	3.8
Time to launch, Duration of advantage	13	1	5.0	3.5
Access to Superior Finite Resources (FR)				
Productivity & Time Management	7	1	3.0	3.6
Economies of Scale & Scope	5	1	3.0	3.8
Location	2	1	3.5	3.5
Research & Development	5	1	3.0	4.0
Exploiting Infinite Resources (IR)				
Market & Competitive Orientation	25	1	3.0	3.8
Motivation & Recognition	4	1	3.5	3.8
Attitude, Drive & Energy	2	1	3.0	3.0
Superior Competencies and Capabilities (CC)				
Leadership Competencies	12	1	3.0	3.3
Core Competencies/Capabilities	31	1	4.0	4.0

See Appendix A for further details and additional graphs and figures.

p.t.o.

3.3 SECTION B AND C: PROMPTED RESPONSES

All sections of the questionnaire, subsequent to Sections A1 and A2, provide respondents with a list of prompted factors as well as with a rating scale. For Sections B and C a rating scale of 0 to10 is provided:

0 = Not Important to 10 = Extremely Important.

Respondents were asked to first select *only* 8 factors from the list of 20. Thereafter they were requested to rate only the 8 selected factors.

3.3.1 Independent Concepts within Section C

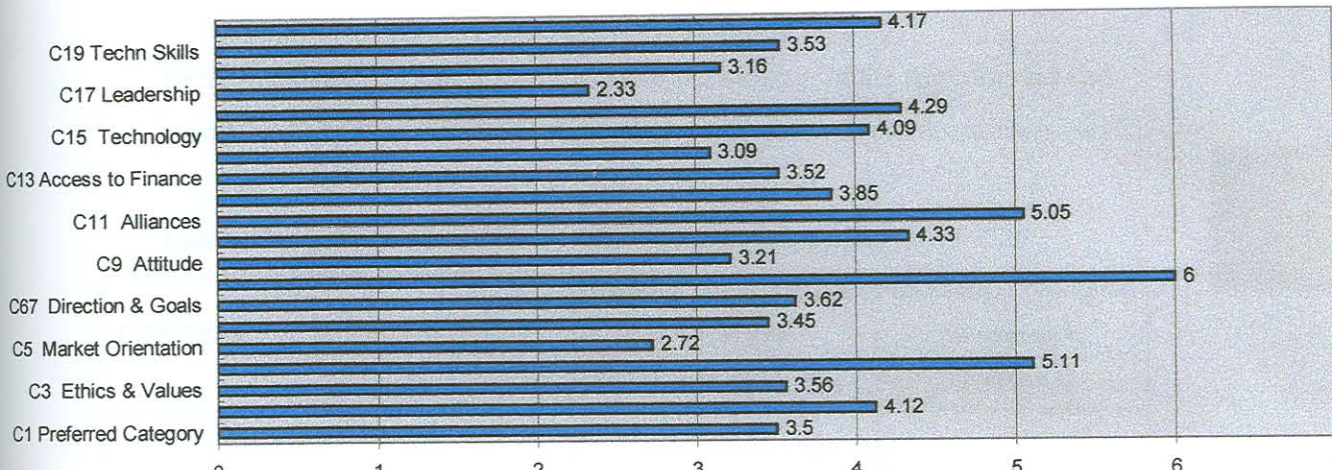
3.3.1.1 Overall Rating per Concept

Respondents were asked to provide priority ratings for each independent concept. For ease of reporting, the individual concepts will be coded from C1 to C20, in the same order as the order with which they are positioned in Question C of the survey questionnaire in Appendix A. The average priority rating for the total sample was calculated and the resulting top five rank is illustrated below and in Figure 4.3.

The top five concepts to appear when considering the average rating of the total sample, as the most important factors to consider when formulating a strategic plan to create SCA for a firm in the industries represented by the respondent group:

1. Leadership Competencies (Management) [c17 = 2.33];
2. Market and Competitive Orientation [c5 = 2.72];
3. Strategic Investments and Projections [c14 = 3.09]
4. People Embodied Skills and Competencies [c18=3.16];
5. Staff Attitude [c9 = 3.21]

Figure 4.3 Average Priority Rating of Prompted Sources by the Total Respondent Group



	C1 Preferred	C2 Brand	C3 Ethics &	C4 Int Com	C5 Market	C6 Innovation	C67 Direction	C8 Motivation	C9 Attitude	C10 Stakehold	C11 Alliances	C12 Productivi	C13 Access to	C14 Str Inves	C15 Technolog	C16 Data and	C17 Leadershi	C18 People	C19 Techn	C20 Adaptabilit
Average Rating	3.5	4.12	3.56	5.11	2.72	3.45	3.62	6	3.21	4.33	5.05	3.85	3.52	3.09	4.09	4.29	2.33	3.16	3.53	4.17

Average Rating by Total Sample

3.3.1.2 Average Rating Per Concept: Comparison between section A2 and C

Comparing these results with concepts gathered in section A, it could be argued that the concept Preferred Positioning in terms of brand image and reputation is comparable with the concept of market and competitive orientation, since both factors imply a certain level of concern with the needs of the customers and their propensity to buy from a particular firm. In both the unprompted and prompted sections of the questionnaire, the source of Leadership Competencies was mentioned as of great importance. A large number of respondents not only mentioned the issues of Personnel Attitude and Drive as important to consider when planning for SCA(s), but also rated it as highly important. It is, therefore, interesting to notice the low rating, therefore low rank order this factor receives in the prompted section; although one could assume a certain level of the importance of staff and their attitude, abilities and support is implied in the concept rated overall as the fourth most important issue.

Table 4.9 shows for the shifts in relative positioning of the unprompted and prompted factors as reflected by the answers to questions in sections A and C.

Table 4.9 Shifts in ranking of the concepts of section C: C1-C20

CONCEPT	Ranking of Unprompted Sources as in Question A	Ranking of Prompted Sources as in Question C
Leadership Competencies	2	1
People Embodied Skills	3	4
Innovation & Creativity	4	6
Access to Technology	5	Below 10
Strategic Investments & Projections	Below 10	3
Market & Competitor Orientation	1	2
Personnel Attitude, Energy & Drive	Below 10	5

3.3.1.3 Priority Rating of Prompted Concepts by Experience Level of Respondents

For a better view on reasons for the shift depicted in Table 4.6, the results of Questions B and C must be analyzed by industry category and by sub-categories of the number of years experience in field.

The respondents were divided into 3 predetermined groups, based on the level of overall business experience reported in the classification section of the questionnaire. The 3 sub-categories are: (1) Respondents with more than 15 years overall business experience, (2) Respondents with more than or equal to 10 years, but less than 15 years overall business experience, and (3) Respondents with less than 10 years business experience. Although categories were decided upon before analyzing the classification details, three groups emerged:

1. X≥15 years, with 14 members
2. 10≤Y<15 years, with 21 members
3. Z<10 years, with 22 members.

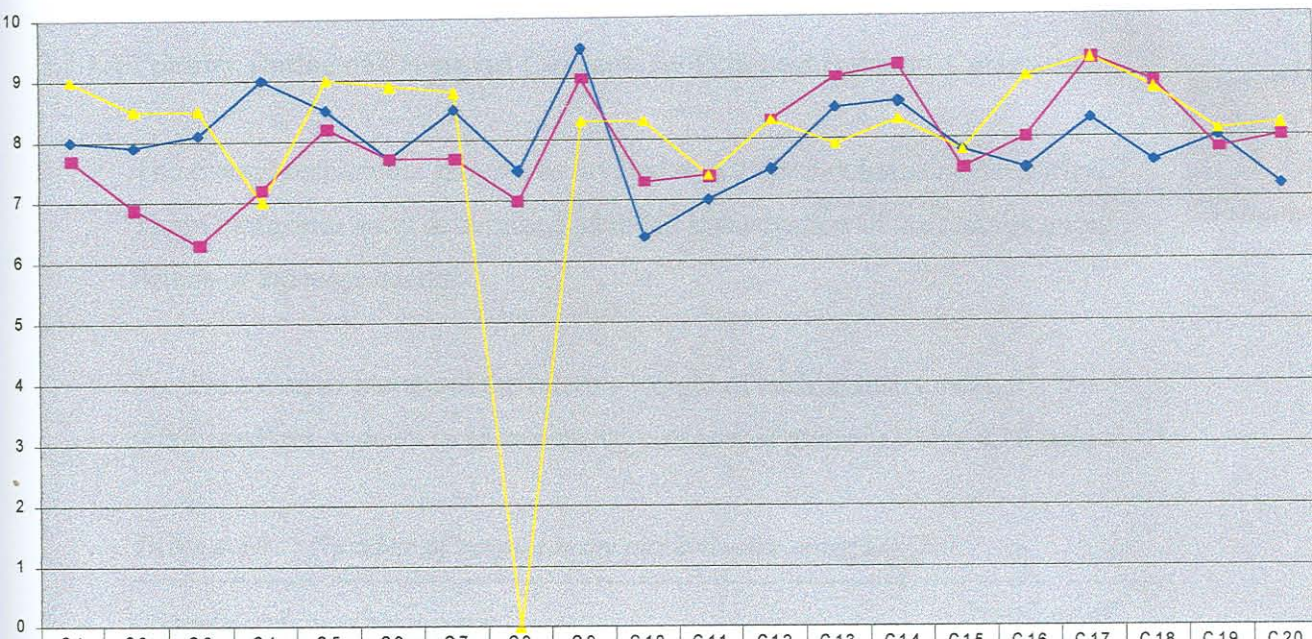
Since the number of respondents in a group differed, and a more reliable result will be obtained by finding the sub-category mean (Doyle and Wong 1997), only the average rating per experience category will be discussed here. (For more details consult Appendix C.)

It is clear from Figure 4.4 the data that the two most experienced sub-groups, follow a reasonable similar pattern with regards to their average priority rating of the individual concepts. On could therefore hypothesize that the level of business experience plays a significant role in perceptions of respondents (or managers) concerning those concepts most likely to be taken into account when future planning to create or sustain a competitive advantage is considered. If the effect of the lower level of experience is ignored, then the five concepts emerge as the factors most highly rated.

Personnel Attitude, Energy & Drive
Strategic Investments & Projections
Leadership Competencies
Access to Financial Resources
Market & Competitive Orientation.

p.t.o

Figure 4.4 Average Rating of All Concepts by Total Business Experience



	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20
	8	7.9	8.1	9.0	8.5	7.7	8.5	7.5	9.5	6.4	7.0	7.5	8.5	8.6	7.8	7.5	8.3	7.6	8.0	7.2
<15	7.7	6.9	6.3	7.2	8.2	7.7	7.7	7	9	7.3	7.4	8.3	9	9.2	7.5	8	9.3	8.9	7.8	8
	9	8.5	8.5	7	9	8.9	8.8	0	8.3	8.3	7.4	8.3	7.9	8.3	7.8	9	9.3	8.8	8.1	8.2

Concepts

The concept of Leadership Competencies received the highest sub-category mean for the two groups with less than 15 years overall business experience. Personnel/Staff Attitude, Drive & Energy had the highest sub-group mean for those respondents with more than or equal to 15 years of business experience. What is interesting to notice, is that all 20 concepts were selected when respondents were given the choice to non-select some of the prompted concepts. (This is not true for the subgroup with less than 10 years experience, since Personnel Attitude, Drive & Energy did not receive a single mention from this group). If the effect of the influence of group Z (less than 10 years experience) is negated, then the concept with the lowest overall average is that of Networks and Alliances. Although this factor was recorded as important 19 times by the respondents, it received a high importance rating only twice.

3.3.1.4 Priority Rating of Prompted Concepts by Different Industry Categories

The overall respondent group was divided into 7 distinct industry categories. These categories were determined after full investigation of the classification details of the respondents.

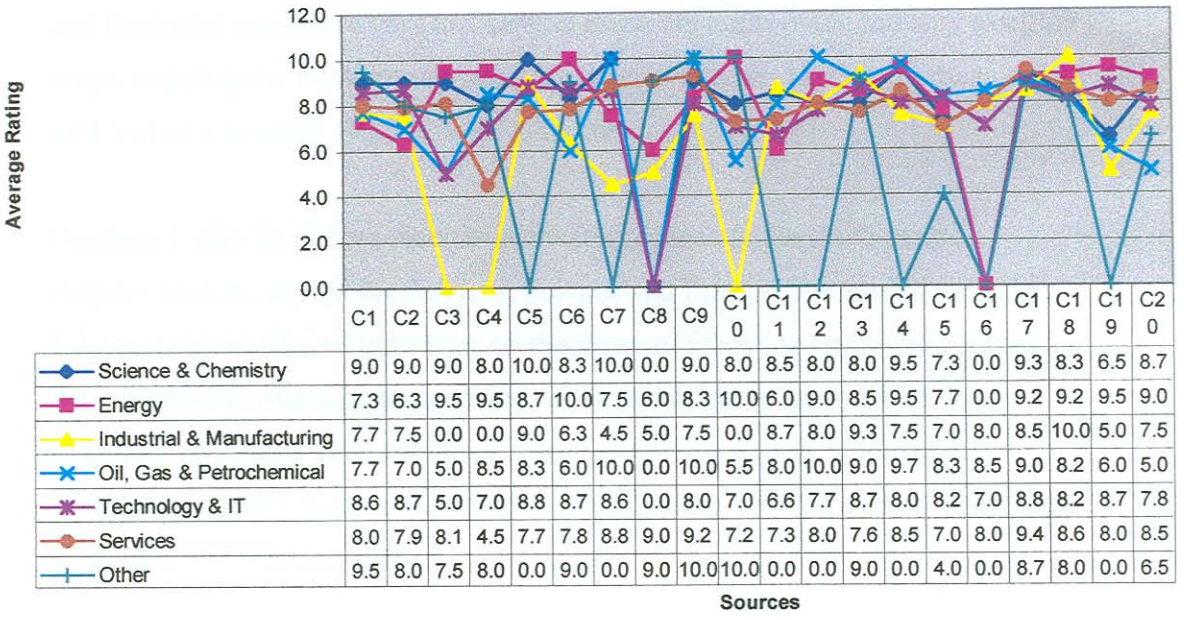
To give a clearer picture of the relative weight of each industry category, the number of respondents in each industry category is given in Table 4.10 below.

Table 4.10 Number of respondents per industry category

INDUSTRY CATEGORY	Number of Respondents
Science and Chemistry	6
Energy	7
Manufacturing & Industry	5
Petrochemical, Oil & Gas	5
Technology and IT	17
Services	14
Other	3
Total	57

It is noticeable, as demonstrated in Figure 4.5, that there are 8 concepts for which the industry category has achieved a sample mean of 10. This implies that every single respondent who is a member of that industry category has given the highest possible priority rating for that specific concept.

Figure 4.5 Prompted Responses Cross Tabulated by Industry Subgroups



	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20
Science & Chemistry	9.0	9.0	9.0	8.0	10.0	8.3	10.0	0.0	9.0	8.0	8.5	8.0	8.0	9.5	7.3	0.0	9.3	8.3	6.5	8.7
Energy	7.3	6.3	9.5	9.5	8.7	10.0	7.5	6.0	8.3	10.0	6.0	9.0	8.5	9.5	7.7	0.0	9.2	9.2	9.5	9.0
Industrial & Manufacturing	7.7	7.5	0.0	0.0	9.0	6.3	4.5	5.0	7.5	0.0	8.7	8.0	9.3	7.5	7.0	8.0	8.5	10.0	5.0	7.5
Oil, Gas & Petrochemical	7.7	7.0	5.0	8.5	8.3	6.0	10.0	0.0	10.0	5.5	8.0	10.0	9.0	9.7	8.3	8.5	9.0	8.2	6.0	5.0
Technology & IT	8.6	8.7	5.0	7.0	8.8	8.7	8.6	0.0	8.0	7.0	6.6	7.7	8.7	8.0	8.2	7.0	8.8	8.2	8.7	7.8
Services	8.0	7.9	8.1	4.5	7.7	7.8	8.8	9.0	9.2	7.2	7.3	8.0	7.6	8.5	7.0	8.0	9.4	8.6	8.0	8.5
Other	9.5	8.0	7.5	8.0	0.0	9.0	0.0	9.0	10.0	10.0	0.0	0.0	9.0	0.0	4.0	0.0	8.7	8.0	0.0	6.5

The concepts mentioned with an industry mean of 10, the industry from which the respondents came, and the number of respondents in each group are set out in Table 4.11 below.

Table 4.11 Concepts with an industry mean of 10

Concept	Industry	Group Size
Market Orientation	Science and Chemical	6
Innovation & Creativity	Energy	7
Direction & Goals	Science	6
Direction & Goals	Petrochemical	5
Personnel Attitude, Drive	Petrochemical	5
Stakeholders & Constituents	Energy	7
Product	Petrochemical	5
People-embodied Skills	Industrial	5

As noted several times before, Personnel Motivation (specified as Recognition and Rewards) received a very low sample mean. In terms of the industry category mean, respondents from the sub-category Service Industry allocated a mean rating of 9 (out of a possible 10) to this SCA source.

Business Ethics & Values receive a subcategory mean of below 5 from all industry sectors, except for Services, Science and Energy. A mean of more than 7.5 was achieved for all industries on the factor of Direction and Goals, except for the Industrial & Manufacturing group, where a sub-group mean of 4.5 was recorded. In similar vein, the sub-groups Energy & Sciences recorded a significantly lower mean (of 0), relative to the average of 7.9 for the concept Data & Information Management.

One might expect certain industry members to show some bias to concepts directly related, and/or integrated into, and/or of recurring nature to their industry. For example, one might expect respondents from the IT or Technology Industry Sector to be more likely to give a high priority rating to the two concepts, Technology and Technology Embodied Competencies. One might also expect respondents from the Service Industry to record an increased priority rating on issues such as Personnel Attitude & Drive, and People Embodied Competencies. In the case of people-motivated concepts such as Leadership Competencies, Motivation and Attitude certainly received a sample mean for the Services Industry of equal to or above 9. People Embodied Competencies and Direction and Goals received sample mean of just below 9 - 8.6 and 8.8 respectively.

Further research is required, but a certain level of agreement with the expected trend with regards to the tendency of respondents from the Technology Industry, was shown. Although the concepts, Technology and Technology Embodied Competencies, did not receive the highest sample mean for this group, there was a mere 0.1 and 0.4 difference in the sample mean for those concepts and the highest

rated concept for that group - Market & Competitor Orientation and Leadership Competencies.

3.3.2 Questions in Section C as Interdependent Concepts

Section 3.2 of Chapter 4 discusses the way in which the unprompted concepts were re-assigned to 4 domains. The 20 concepts listed in Section B of the questionnaire, was re-assigned to the domains defined in Sections D and E of the questionnaire.

Market Positioning	The positioning a firm achieves or obtains in the minds of all constituents. (PP)
Finite Resources	Limited tangible resources such as machines, time and money. (FR)
Infinite Resources	Unlimited and infinitely available resources such as passion, energy, direction, motivation, innovation, etc. (IR)
Competencies and Capabilities	Human- and technology-embodied skills, experience and knowledge to which the business has access. (CC)

3.3.2.1 Priority Rating of the four Domains by the Total Sample Group

Table 4.12 sets out the overall priority rating of the 4 domains by the total sample group as a whole. It would be prudent to investigate the affect of grouping the respondents into different subgroups to see the affect this might have on the results, since there is so little difference in the priority rating of the 4 domains.

Table 4.12 ***Priority rating of all four domains by the total sample group***

	Preferred Positioning PP	Finite Resources FR	Infinite Resources IR	Competencies & Capabilities CC
Average Priority Rating	8.0	8.1	8.3	8.4

The subgroups to be discussed and further investigated are related to experience and industry sector subgroups, and are set out below.

Table 4.13 Sub-categories of the respondent group

Main Category	Sub-Category	Average Experience (In Years)	Number of Respondents
Respondents	Overall Respondent Group	12.0	57
Industry	Science and Chemistry	9.8	6
	Energy	11.4	7
	Industrial & Manufacturing	9.6	5
	Petrochemical	14.2	5
	Technology, IT	10.9	17
	Services	12.6	14
	Other	23.0	3
Overall Business Experience	More than 15 Years Experience	20.4	14
	Between 10 and 15 Years	11.7	21
	Fewer than 10 Years Experience	7.1	22
Marketing Experience	More than, or equal to 3 Years Marketing Experience	11.5	15
	Fewer than 3 Years Experience	12.3	42

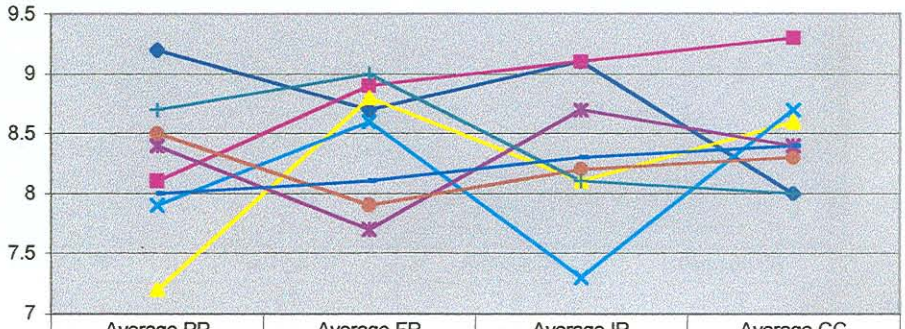
.2.2 Average Priority Rating of 4 Domains by Different Industry Subcategories

There is a high level of correspondence in priority rating of the 4 domains across industry subgroups. All 4 domains had sample means of well above 8.0. There is, therefore, not a single domain that is considered to be of little or no importance with regards to their perceived role in creating SCA for a firm or SBU.

Some points of interest are: (a) for the domain Preferred Positioning, and sub-group Science& Chemistry a sample mean of 9.2 was measured; and (b) for this same domain, the lowest mean of 7.2 was recorded for the industry subgroup of Industrial & Manufacturing

A very low sample mean of 7.3 was achieved for the subgroup Petrochemical & Oil Industry, with reference to the domain Infinite Resources. The highest mean, 9.3, was recorded for the Industry subgroup Energy, and the domain Superior Competencies and Capabilities. (See Appendix D for details of the responses to sections B and C of the questionnaire.)

Figure 4.6 Average Priority Rating of 4 Domains by Respondents from the Different Industry Categories

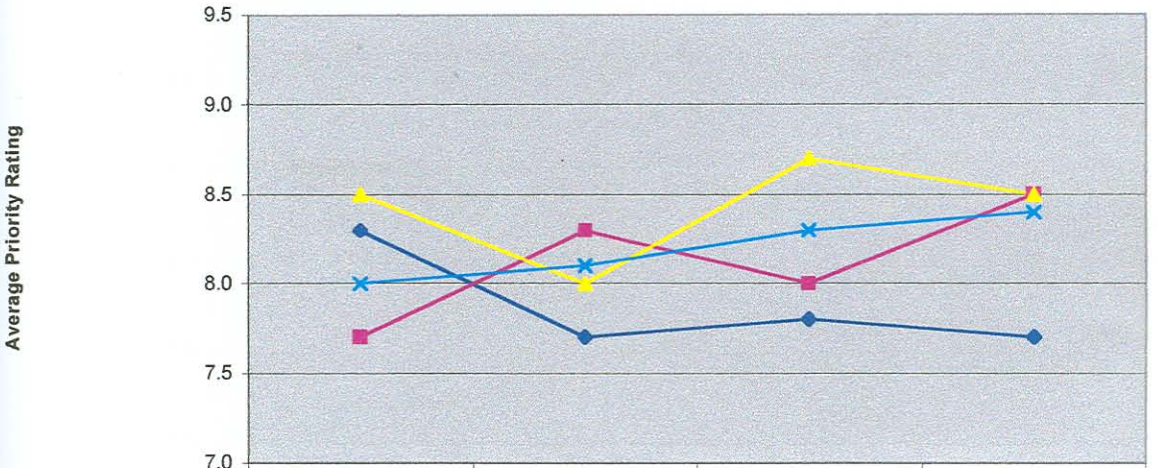


	Average PP	Average FR	Average IR	Average CC
Science, N=6	9.2	8.7	9.1	8.0
Energy, N=7	8.1	8.9	9.1	9.3
Industrial, N=5	7.2	8.8	8.1	8.6
PetroChemical, N=5	7.9	8.6	7.3	8.7
Technology, N=17	8.4	7.7	8.7	8.4
Services, N=14	8.5	7.9	8.2	8.3
Other, N=3	8.7	9.0	8.1	8.0

3.3.2.3 Average Priority Rating of 4 Domains by Different Experience Level Subgroups

The low level of difference in average priority rating of the 4 domains is clearly demonstrated in Figure 4.7, since all means fall between the value of 7.7 and 8.7. It is also noticeable, that there is a difference in opinion, although not very significant, between the respondents with the highest level of experience, and those with the lowest level of overall business experience. This is reflected in the overall group mean that stays at 8. It seems that the overall business experience level does not have a very large impact when the average experience as high as for this group.

Figure 4.7: Average Priority Rating of the 4 Domains by Experience Level Subgroups



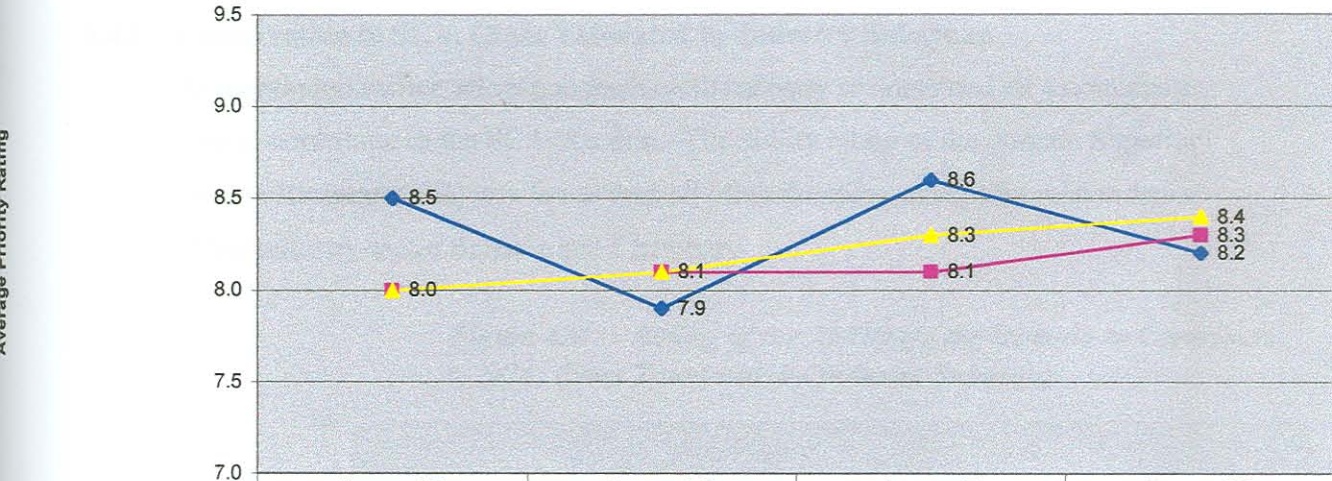
	Average PP	Average FR	Average IR	Average CC
X<15, N=14	8.3	7.7	7.8	7.7
10<Y<15, N=21	7.7	8.3	8.0	8.5
Z<10, N=22	8.5	8.0	8.7	8.5
Overall Group	8.0	8.1	8.3	8.4

Domains

3.3.2.4. Average Priority Rating of 4 Domains by Different Marketing Experience Level Subgroups

The author was interested to find out what impact the level of marketing experience might n respondents' perceptions about the 4 domains. The picture that emerged was quite similar to the one reported in section 3.3.2.1 of Chapter 4, with no sub-group recording a mean of less than 7.9 or higher than 8.6. Once again a clear indication that all 4 domains are considered of high importance when the respondents consider the role they could play in creating a sustainable competitive advantage (SCA) for their business or strategic business unit.

Figure 4.8 Average Priority Rating of 4 Domains by Marketing Experience Level Subgroups



	Average PP	Average FR	Average IR	Average CC
More/Equal 3 Years	8.5	7.9	8.6	8.2
Less 3 Years	8.0	8.1	8.1	8.3
Overall Group	8.0	8.1	8.3	8.4

3.4 Section D: Prompted Responses for the 4 Domains

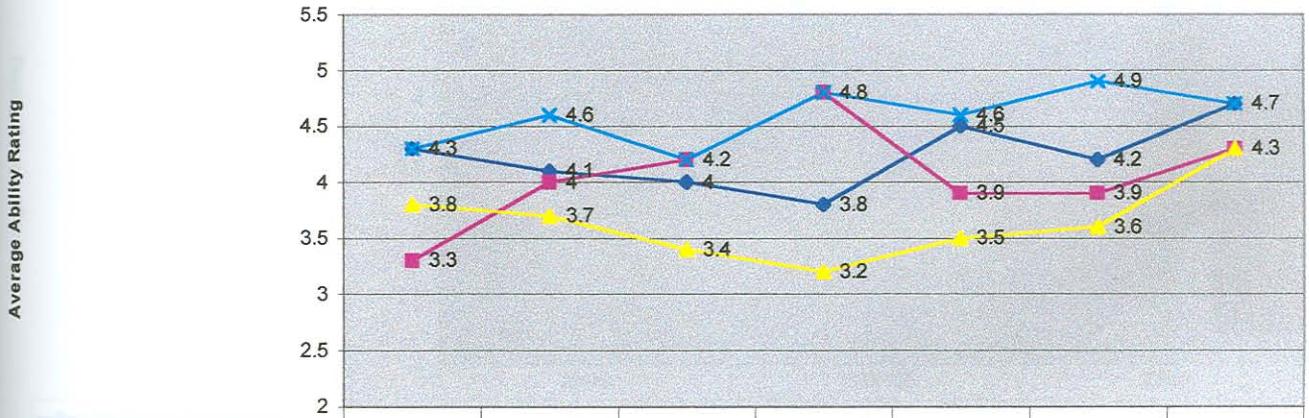
Respondents were asked to assess the ability or in-ability of the 4 domains to contribute to the firm's SCA(s). A rating scale of 1 (Do not agree at all) to 5 (Totally agree) was provided.

When observing the group as a whole, it is clear that not one of the 4 domains received a sample mean ability rating of less than 3. Since a rating of 3 is the central or neutral position on the scale of 1 to 5, this means that all respondents agreed positively to the ability of all 4 domains to contribute to the SCA(s) of a SBU or firm. In order to get a more detailed view on the results of the survey, the responses are analyzed and reported in the sub-categories of Industry Sector, Overall Business Experience and Level of Marketing Experience.

3.4.1 Contribution to SCA, Cross Tabulated by Industry Subgroup

As mentioned earlier, all respondents of all industry sectors rated all 4 domains as able to contribute to the SCA of a firm. The ability rating of the domain Superior Infinite Resources (IR) was lower than all other domains, except for respondents of the industry sector Science and Chemistry

Figure 4.9 Rating of the Ability tfo the Domain to Contribute to SCA, Cross Tabulated by Industry Subgroup



	Science	Energy	Manufacturing	PetroChemical	Technology	Services	Other
Preferred Positioning	4.3	4.1	4	3.8	4.5	4.2	4.7
Superior Finite Resources	3.3	4	4.2	4.8	3.9	3.9	4.3
Superior Infinite Resources	3.8	3.7	3.4	3.2	3.5	3.6	4.3
Superior Competencies	4.3	4.6	4.2	4.8	4.6	4.9	4.7

Industry Sector

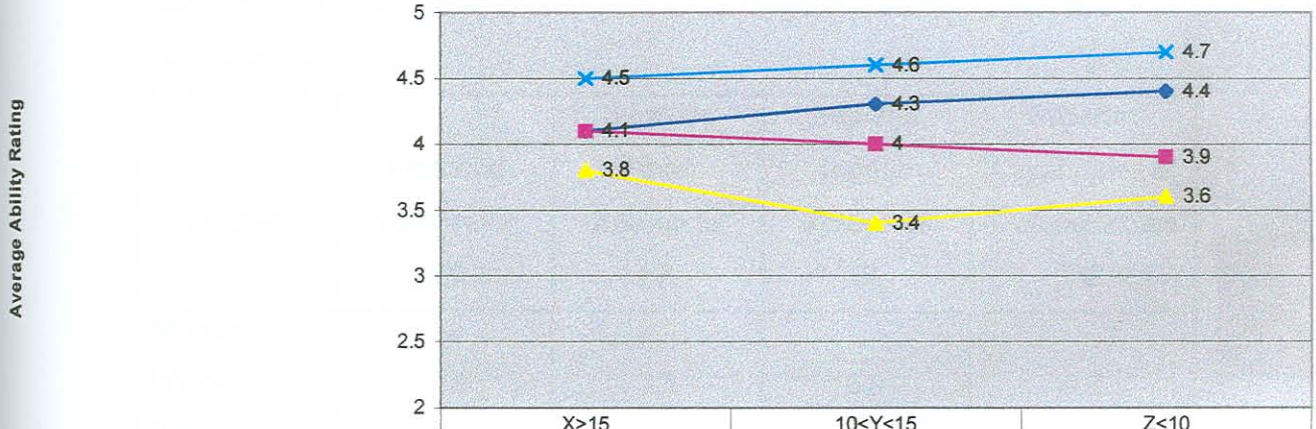
The domain of Superior Competencies and Capabilities received in all instances the highest average ability rating by all industry sectors. This high level of confidence was only recorded for the domain Superior Finite Resources (4.8 mean rating) by respondents from the Petrochemical, Oil & Gas subgroup. Also notice that the respondents from the industry sector Science & Chemistry considered Superior Finite Resources able, but least able of all domains, to contribute to the SCA of firms.

The domain of Superior Competencies and Capabilities (CC), recorded a reasonably consistent median rating of 4 over all industry sectors. The lowest ability to contribute for this sample, was recorded by the Industry sector Petrochemical, and the highest rating by the grouping Other. (The researcher suggests that this group's results will unduly skew the picture and should therefore be ignored.)

3.4.2 Contribution Ability, Cross Tabulated by Experience Level Subgroup

A simple analysis of mean differences between the business experience level subgroups, shows very similar trends, with a sample low for the domain IR and a clear sample high of over 4.5 for the domain CC.

Figure 4 .10 Rating of the Ability of a Domain to Contribute to SCA Cross Tabulated by Experience Level



	X>15	10<Y<15	Z<10
Preferred Positioning	4.1	4.3	4.4
Superior Finite Resources	4.1	4	3.9
Superior Infinite Resources	3.8	3.4	3.6
Superior Competencies & Capabilities	4.5	4.6	4.7

(Since subdividing the sample group into Marketing Experience subgroups would only attempt to break experience level down into more detail, and does not offer a significant contribution to results to this point, the researcher find this unnecessary in the light of the results and will merely attach details for further perusal in Annexure D)

3.5 SECTION E: PROMPTED IMPORTANCE RATING OF THE 4 DOMAINS

3.5.1 Prompted Priority Ratings for all four Domains by the Total Sample Group

In this section of the questionnaire, all concepts were divided into the 4 domains as defined in paragraph 3.3.2 of Chapter 4. The respondents were asked to rate the four domains in terms of the priority placed on each in terms of the role they could play in creating sustainable competitive advantages for the SBUs in their business or the firms in their industry. A rating scale of 0 (No important at all) to 10 (Extremely important) was provided.

When looking at the total respondent group's priority ratings for the 4 domains, all domains received a sample mean rating of well above 5. The sample mean for all respondents and all four (4) domains never drops below 6.8.

Table 4.14 Average priority rating of the 4 prompted domains by the total sample group

Domain	Preferred Positioning PP	Superior Finite Resources FR	Superior Infinite Resources IR	Superior Capabilities & Competencies CC
Average Priority Rating	7.8	7.5	6.9	8.7

3.5.2 Priority Rating By Respondents from different Experience Level Subgroups

Should one investigate individual priority ratings, any single rating only drops below a rating of 5, for merely 16 out of the possible 228 mentions. The researcher deduces from these ratings that respondents find all 4 domains important considerations for creating and sustaining CA for their firms or businesses.

Analysis of the responses by different experience level subgroups adds almost no additional insights into the priority rating of the 4 domains, and merely confirms the original finding for the overall sample ratings, sample means and medians as expressed earlier in paragraph 3.5.1.

Table 4.15 Priority rating of the 4 domains in prompted questions, cross-tabulated by different experience level subgroups

Experience Level Subgroups	Average Priority Rating for PP	Average Priority Rating for FR	Average Priority Rating for IR	Average Priority Rating for CC
X>15	8.3	7.8	7.3	8.7
10≤Y≤15	7.0	7.4	6.6	8.8
Z<10	7.9	7.2	6.8	8.5
Number of Years Marketing Experience	Average Priority Rating for PP	Average Priority Rating for FR	Average Priority Rating for IR	Average Priority Rating for CC
X≥3	8.4	7.3	6.8	8.5
X<3	7.4	7.5	6.9	8.7

Upon investigation of the frequency of mention by a percentage of the category sample, the following pictures emerge. (Study Figure 4.11- Figure 4.14 below.)

Figure 4.11 Priority Rating of the Domain Preferred Positioning, Cross-tabulated by Experience Level Subgroups

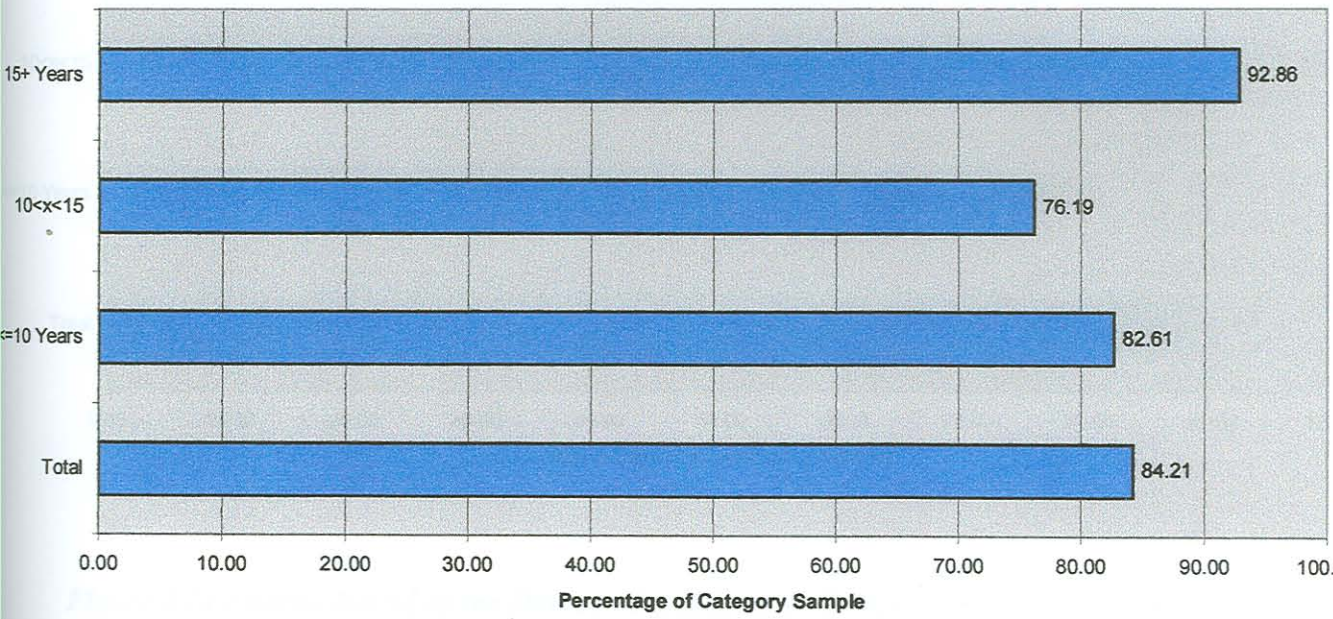


Figure 4.12 Priority Rating of the Domain Finite Resources, Cross-tabulated by Experience Level Subgroups

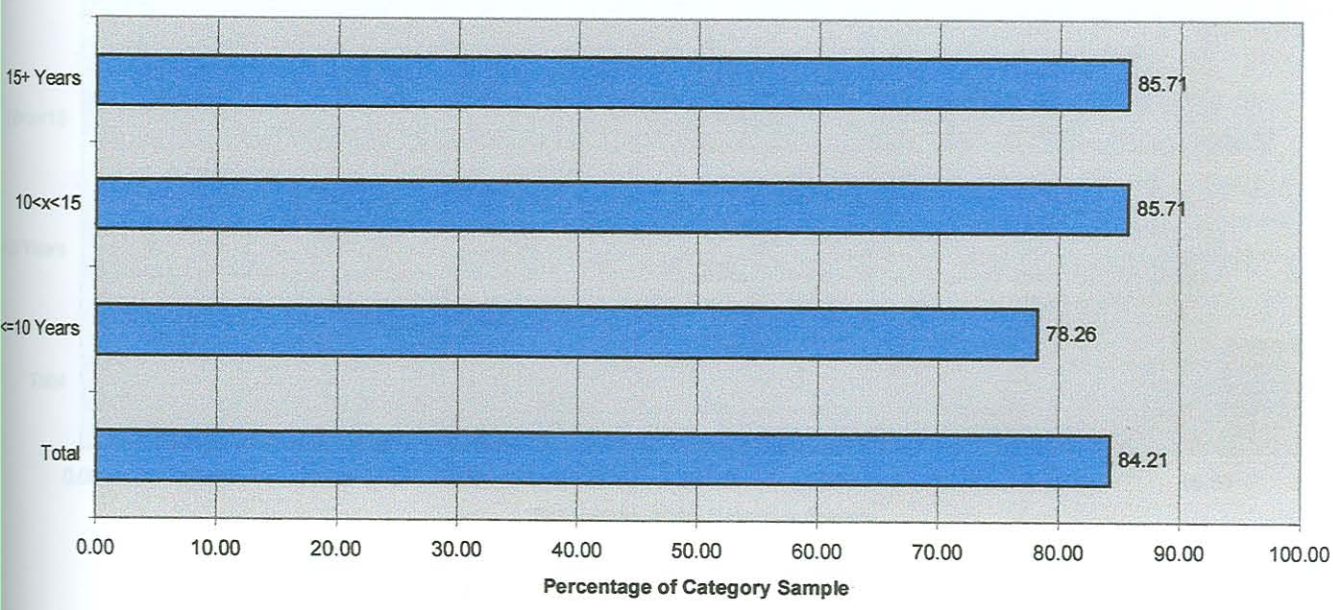


Figure 4.13 Priority Rating of the Domain Infinite Resources, Cross-tabulated by Experience Level Subgroups

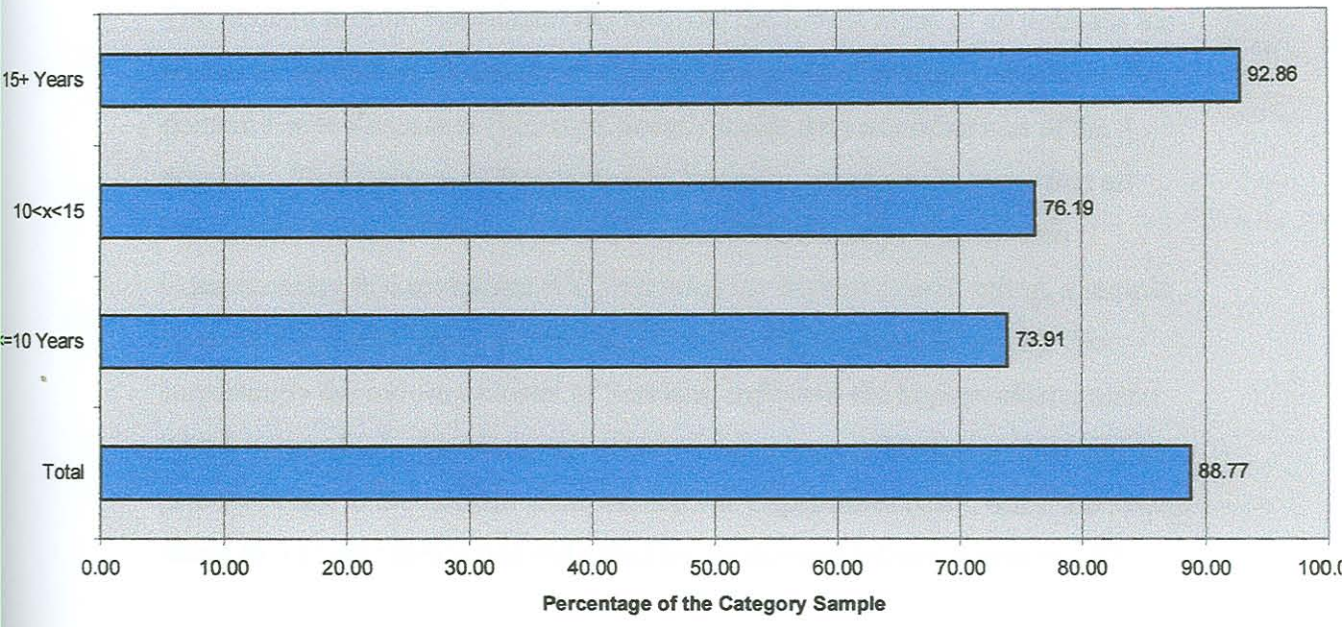
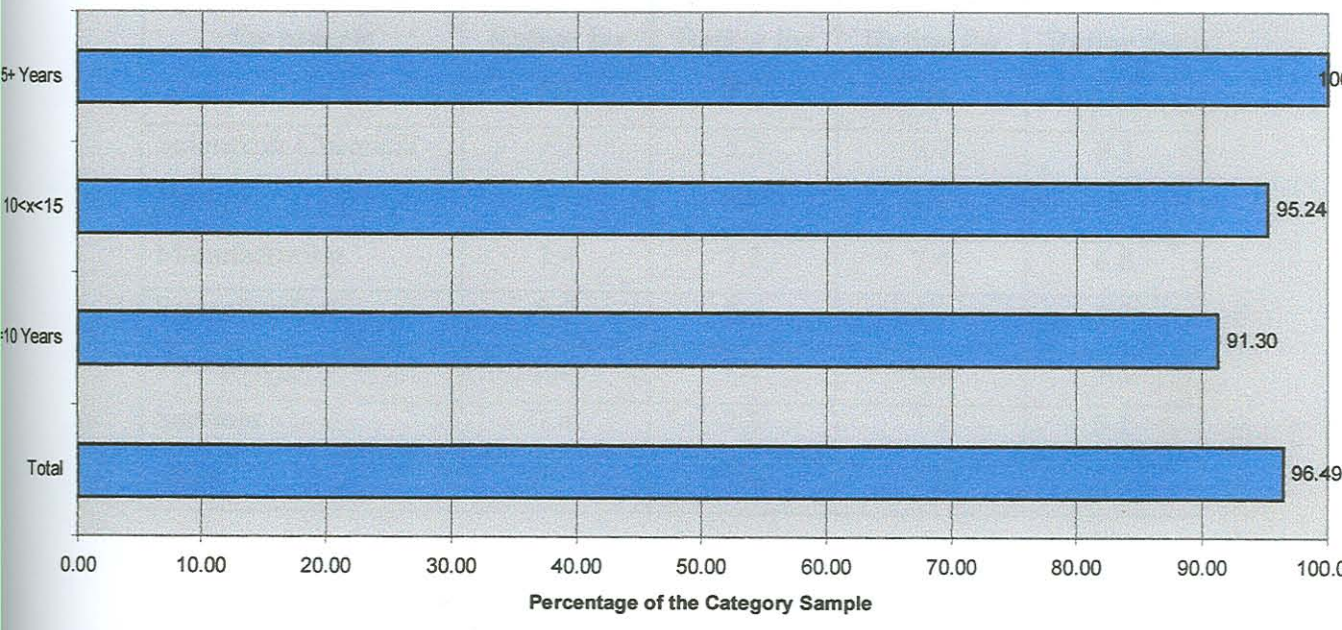


Figure 4.14 Priority Rating of the Domain Capabilities & Competencies, Cross-tabultated by Experience Level Subgroups



3.5.3 Priority Rating By Respondents from different Industry Subgroups

The domain Infinite Resources (IR) received the lowest mean of all domains for almost all industries, except for the cluster Science & Chemistry, who rated the domain Finite Resources (FR) significantly lower than any other one of the 4 domains. This rating for FR was almost 2 priority rating points lower that all other ratings recorded by the cluster Science & Chemistry. The domain Competencies & Capabilities (CC) recorded the highest overall rating, a sample mean of 8.4 (other domains recorded PP =7.5; FR = 7.4 and IR = 6.8). Not surprisingly the industry cluster of Services, indicated the highest cluster mean with a value of 9.1. Similarly, the cluster Technology or IT allocated its highest priority rating to the domain Competencies & Capabilities (CC), while the lowest rating (6.3 cluster mean) was indicated for the domain Infinite Resources (IR).

Table 4.16 Priority rating of the 4 domains in prompted questions, cross tabulated by respondents from different industry subgroups

Industry subgroup of the sample	Average Priority Rating for PP	Average Priority Rating for FR	Average Priority Rating for IR	Average Priority Rating for CC
Science & Chemical	7.7	5.3	7.7	8.3
Energy	6.1	8.6	6.0	8
Manufacturing	7.4	7.2	7.4	6.8
Petrochemical	8.0	8.6	6.2	8.8
Technology & IT	8.2	7.2	6.3	9.1
Services	7.4	7.3	7.2	9.1
Other	7.5	7.4	6.8	8.4

3.6 COMPARISON OF UNPROMPTED CONCEPTS AND PROMPTED CONCEPTS

Up to this point of the discussion, each question was dealt with, to a certain degree of isolation. Sections were grouped together only when the same concepts were first selected, and then rated. In the following paragraphs, the comparison of sections A and E is done, but only with some manipulation.

3.6.1 Conversion of responses to question A and question E

In Question A1 respondents are given the opportunity to produce unprompted sources of SCA and then asked to rank them in Section A2. The sources mentioned in this unprompted manner were then divided into the four domains as defined in question E of the questionnaire. In section E of the questionnaire, respondents were asked to rate the prompted domains of SCA. Here the rating scale, as well as the domains, were provided. This rating scale is converted to a ranking scale and is set out in the table 4.17 below.

Table 4.17 Ranking of the four domains

Domains	Average Ranking as reflected in Question A2	Average Rating as per Question E	Inferred Ranking of Question E
Preferred Positioning	2	7.8	2
Finite Resources	1	7.5	3
Infinite Resources	4	6.9	4
Capabilities & Competencies	3	8.7	1

It is clear that the rankings of the domains are different when they are derived from the unprompted sources (divided into domains), and when the domains are provided and respondents have to rank them. It is very important to note though, that in both cases all four domains were very highly rated as contributors to the SCA of a firm. (Refer to section 3.2 and 3.5 of Chapter 4.) By focusing on the

original rating for question E, it is clear to see that all domains receive a high rating with less than two points difference between the highest ranked domain (CC) and the lowest ranked domain (IR). Although the researcher is very interested in the cause of this shift, the design of the questionnaire did not anticipate this shift, and neither the questions nor the responses lend themselves to further analysis in line with this tendency. In order to respond to or interpret this trend, further research is required.

4. PART 3: CONCLUSION

Fifty-seven respondents were drawn from different industry sectors, different levels of business and marketing experience and some from non-marketing functions. To explore the differences in perception of sources of SCAs and the domains they would be categorize in, separate analysis were performed for the major subgroups as defined earlier in this chapter. Overall the difference were modest and in most cases more severe differences could be explained or should be ignored by the nature of the composition of the subgroups or by the limited number of respondents in the group. Averaging the numbers across subgroups and across industries offered the opportunity to increase the potential accuracy of the results or responses, without losing important information (Starbuck and Mezias 1996). Different graphical treatments illustrated trends clearly and added new light to some controversial trends, areas of uncertainty or questionable results.

CHAPTER 5

RECOMMENDATIONS & OPPORTUNITIES FOR FUTURE RESEARCH

1. INTRODUCTION

The literature research and the resulting empirical survey, could both assist business managers and marketing practitioners in finding and employing sources of competitive advantage to create and/or maintain competitive advantage(s) for the business enterprise they are responsible or co-responsible for. The study's primary aim is to assist business leaders and marketers in finding ways to achieve SCAs in a global marketplace. An important objective is to supply the busy executive with a tool, model or set or guidelines, which could/would assist him/her in doing strategic planning, to establish SCA(s) for his/her SBU, enterprise, firm or group., without having to scan literature across a wide variety of authors and subject categories. Further emphasis is placed on quantifying the opinion of current business executives with regards to the importance or priority rating of such sources and to show how the identified sources of SCA are ranked by the selected sample group of business executives. The theoretical overview, presented in Chapter 2, provides the basis for the SCA Wheel presented to the reader in Chapter 3.

The theoretical overview provided the basis for the design of the SCA Wheel, and pointed the researcher towards concepts and constructs that may need further investigation or expansion of the available secondary information. Interviews with business executives and academics in preparation of the questionnaire, as well as the results of the empirical study, were used as input to adapt and finalize the SCA Wheel. The literature overview also clearly indicated a commonality of opinion among marketing guru's regarding the two major sources of CA: superior competencies and superior resources. For the purposes of clarity and for the specialized audience envisaged for this study - plus a number of reasons set out in chapter 2 - the sources was divided and categorized into four main domains:

Preferred Positioning (PP)

Superior Finite Resources (FR)

Superior Infinite Resources (IR)

Distinctive Capabilities and Competencies (CC).

These domains are not mutually exclusive and a concept that was allocated to a certain domain could, arguably, resort under one or more of the other domains. Leadership skills and experience could, for example, quite naturally resort under the domain Finite Resources, or Distinctive Capabilities and Competencies. Similarly Technologically Embodied Competencies could be allocated to the domains CC or FR.

Empirical research provided additional insights ways to combine certain constructs, as well as insights into some concepts that did not receive the necessary attention in the original model. This led to the expansion of the original model based on the literature review, resulting in the final SCA wheel that included all appropriate concepts, constructs and domains. Most researchers will agree that the same theory can be represented in a variety of ways, resulting in a wide selection of possible graphical displays and models. The specific representation, i.e. the SCA Wheel was selected for three important reasons:

a) Linear models normally inherently imply a certain level of importance to factors mentioned at the top of the list, which is not the case for the circular model.

b) Visual layout often affects the relative importance perceived to have been allocated to each construct. Equal width segments would ensure perception of equal weight for all concepts under each domain.

c) The circular model also illustrates the fundamental idea that issues that are of critical importance to the competitive advantage(s) for the business's environment today, may not be that important tomorrow or further into the future.

2. SHORTCOMINGS OF THE RESEARCH

2.1 SAMPLE SIZE

The two greatest shortcomings of this research was a) the size of the sample and b) the fact that there was no indication whether respondents come from successful enterprises or unsuccessful or not very successful firms. Different business people will define business success and long-term competitive advantages differently. Although business success was defined early in the questionnaire, there was no link made between the reported level of experience and whether this experience was gained in an industry or business they perceive as successful, or not.

Although a sample group of 60 respondents were originally selected and 57 respondents were contacted and surveyed, the resulting subgroups or segments in terms of industry categories, overall business experience levels and marketing experience, were still too small. In evaluating the results of the survey, the sample size proved to be limiting at best and insufficient at worst.

Most difficulty was experienced with the subgroup marketing experience, since only two subcategories (one with very low levels of marketing experience (N= 42) and one with a diversity of higher levels of experience (N=15)), were found. A third shortcoming, therefore, which did not have such a major impact on the study, was the inability of the researcher to establish the definition of "marketing experience" in the mind of the respondents, before asking them to complete a section where they had to record their level of marketing experience.

2.2 SELECTION OF RESPONDENTS

The vast majority of respondents have gained their marketing and business experience in industries and firms operating in and from the United States of America. Although there is no indication that this specific selection would have any impact on the results of the survey, we recommend that researchers select respondents from a wider variety of industries, with multinational business units, for similar projects in the future. The researcher suggests that executives from business operating in and/or from other continents are included in future research projects of this nature.

2.3 ALTERNATIVE INTERPRETATIONS OF TERMINOLOGY

The research questionnaire stated quite noticeably and clearly - on the front cover of the questionnaire - the importance of statements and responses based on practical experience, rather than on book-knowledge or mere opinion, but there is obviously no guarantee that this is the case. In-depth interviews might have assisted in probing to determine answers based on perceptions and answers or responses based on real business experience. In a similar vein, interviews might have assisted the researcher to determine why the huge shifts in opinion from unprompted perceptions to prompted responses occurred. The cause of this shift may be as important as the size of the shift itself.

Open-ended questions, by its very nature, result in a wide variety of responses, with phrases and word-selections based on the experiences and paradigms of the user. To manipulate data and statistics, responses are grouped and categorized by researchers and human analysis experts with different experiences and paradigms to those of the respondents. Incorrect interpretation of phrases used by respondents, could lead to incorrect categorization, which in turn could lead to altered response rates, rankings and ultimately leading the researcher to incorrect or misleading results.

3. FINDINGS AND CONCLUSIONS

The study is clearly divided into two phases with different objectives for each section or phase.

3.1 PHASE 1: LITERATURE REVIEW

The primary objective of the literature review was to establish concepts and constructs to include in the SCA model. This objective was achieved to a high level through the literature review, but it was expanded and enhanced by the results from the primary research.

3.2 PHASE 2: EMPIRICAL RESEARCH

The objective to confirm and expand on perceived sources of competitive advantage was achieved through the use of content analysis during the first phase of the research project. Open-ended questions provided the researcher with over 100 constructs to be used in the comparison between unprompted sources of SCA and the prompted concepts listed in the later sections of the survey.

The respondents recorded one hundred and six different possible factors (sources of SCAs). These listed sources were used as input to identify 42 categories or constructs to represent or categorize all 160 factors. These constructs were then further reduced to the 20 concepts, which corresponded exactly with the 20 constructs used in section B and section C of the questionnaire. This satisfied ***Goal 1*** (Set out in Chapter 3)**:** ***To establish the factors/sources of SCA business executives are likely to include in an unprompted list of SCA factors and (ii) in a prompted list of contributing factors/sources.***

Goal 2: To establish the frequency with which certain constructs are mentioned and to establish whether certain experience levels affect the results.

It was established that the concepts captured in the domains Distinctive Competencies and Capabilities (CC) and the factors listed under the domain Finite Resources (FR),

were mentioned more often than concepts under the domains Preferred Positioning (PP) and Infinite Resources (IR). It was also found that experience levels (either in management, or in marketing, or both) did affect the results, but since the sample groups were so small, further research will be required in this regard.

Goal 3: To establish a priority rating in the current market place for the major constructs identified through the secondary research and literature studies.
Priority ratings for all major constructs were established and the sample mean and sample median for the different constructs were recorded. Experience in different industry sectors, business units, level of business and marketing experience had a significant impact on the results and further research in this regard is required.

It was also found that, although the factors under the domains Finite Resources (FR) were mentioned with a higher frequency, respondents gave a lower priority rating to them. Similarly, once respondents were grouped into different subgroups of business or marketing experience, or industry categories, a significantly different picture emerged. Respondents with more than 3 years marketing experience rated concepts under the domain Preferred Positioning (PP) and Infinite Resources (IR), on average higher than concepts under the other two domains. Respondents with fewer than 3 years marketing experience, on the other hand, rated Capabilities and Competencies (CC) of the highest priority, whilst Preferred Positioning (PP) received the lowest sample mean. Priority ratings allocated by respondents in different subgroups of overall business experience, significantly differed from subgroup to subgroup. Respondents with lower experience levels, on average, gave higher ratings to all domains except Finite Resources (FR). Respondents with the highest level of business experience, gave the highest mean priority rating to PP and the lowest rating to FR.

Subdividing the sample of 57 respondents into the 7 industry clusters, resulted in too few respondents per subgroup to be of relevance, so future research is required with a greater emphasis on the impact on the priority rating by respondents with different experience levels in different industry sectors.

Goal 4: To establish whether all constructs were covered by the model and whether any additional factors are mentioned by the participants that should result in the adaptation or expansion of the original SCA Wheel as designed after the literature review.

All the objectives set for the survey, as indicated in Chapter 3, were achieved. The primary objective, namely to test if the model encompassed all concepts and included the most important domains, was achieved successfully. The final model contains the distilled concepts and represents ALL prompted and unprompted sources of competitive advantage

4. RECOMMENDATIONS FOR FUTURE RESEARCH

The following recommendations are suggested with regards to the in-depth analysis of concepts and constructs and the expansion of the SCA model or SCA Wheel.

4.1 THE IN-DEPTH ANALYSIS OF CONCEPTS AND CONSTRUCTS

- Further investigation into the reasons why ability/inability ratings vary across experience levels by selecting larger response groups and larger clusters of subgroups in terms of marketing experience, strategic decision-making experience and industry subgroups.

- An instrument to measure and test the validity and completeness of the 27 sources represented in the SCA Wheel could be developed.

- Investigation into the reasons why priority ratings of unprompted concepts and prompted concepts differ.

- Priority ratings or weightings of specific sources of sustainable competitive advantage (SCA) could be very different for different industries or industry sectors and should be investigated in depth.

- Experience levels of respondents in different functions or roles within a specific firm within a specific industry could have an impact on the priority and ability ratings assigned to sources of SCA.

- Currently respondents rate certain unprompted sources highly, but when prompted, other sources receive the highest priority ratings. Studying the theories of researchers and more specifically the resulting model of this study, may result in totally altered perceptions. This should be investigated in depth.

- The product or business life cycle or the developmental status of the business may have an impact on the perceptions of employees in that firm. This could may result in "snapshot" responses, thus providing time-related lists of sources, priority and ability ratings.

4.2 THE EXPANSION OF THE SCA MODEL

The graphical model (SCA Wheel) resulting from this study includes two definite layers, (i) the 4 domains, and (ii) the 27 sources or constructs expanding upon the four domains. It has become quite clear that the concepts would have different priority ratings in different industries and for different development phases of a firm within a certain industry. Future research in specific industries could provide the necessary insights and details to expand the model to third and even fourth layer concepts or factors. Such expanded models could be industry-specific and could provide users (marketing practitioners and strategic planners) with an improved/enhanced tool to use when considering all sources of competitive advantages for a firm with their specific set of unique industry realities and circumstances. Such an extended model should be able to

provide SBUs within a firm with more ways to identify the unique function and role each SBU has in building, and enhancing the overall strategy of the firm. Such questions as: "Which sources are within my circle of influence and control?" and "What can our SBU do to generate or contribute to the SCA(s) of our firm?", could be answered by such an enhanced model.

5. IMPLICATIONS FOR MANAGEMENT

The graphical model of Sustainable Competitive Advantage (or the SCA Wheel as it was called throughout this document), could be used as a thinking, planning and guidance tool by marketing practitioners and strategic managers alike. The graphical model provides an at-a-glance overview of the sources of sustainable competitive advantages, and the four domains (PP, CC, FR and IR) under which all sources was classified. The format and design of the model should facilitate the un-biased thinking of managers - without having the position or size of the source segments affect their judgment or thinking. Marketers should prioritize the sources by considering environmental factors, their own customer's needs, their current situation as well as their future direction and vision. It is suggested that marketers should do audits and benchmark their practices and plans with high performance firms and adapt theirs in order to enhance their CA(s) to achieve an improved competitive position in the marketplace.

Current development status or a business, and the business's growth or decline, should affect the way in which managers select the sources of SCA, they wish to focus their attention upon.

The model provides the "skeleton" onto which the marketing strategy and tactical plans could be hung. It should ensure that ALL possible sources are at least considered, even if discarded after consideration. It should also provide less experienced marketers and managers with a "suitcase" to unpack. For example: should a construct represented on the model be of great importance to a firm, the manager (supported by other appropriate

parties) could "unpack" that segment by adding all factors in that firm which contributes to that construct.

An aspect highlighted by the research and therefore of importance for the users of the model, is the effect experience in different industry subgroups has on the interpretation of terminology and the implication for the application of the concepts on the business. The researcher suggests that that managers should accept the wheel as a generic model for all industries and that it should be adapted suit their unique set of circumstances, environment and industry. Prudent managers and marketing practitioners are advised to invest some of their valuable finite and infinite resources to expand the concepts in the SCA Wheel, with the aim to develop a unique model for their unique set of circumstances and the unique internal and external environmental factors impacting upon their business.

6. CONCLUSION

In this final chapter the findings of the research, based on the original objectives and goals, were summarized in an attempt to highlight the main areas of focus and the resulting benefits of the study. Despite some of the shortcomings of the research, valuable conclusions were drawn and suggestions for further research were offered. The final paragraph in this chapter highlighted the implications for management and warned prudent managers to use the model as a starting-point to develop their own model, in line with their unique set of circumstances and the current status of their businesses.

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APPENDIX A

Sustainable Competitive Advantage

The purpose of this questionnaire is to explore factors that could contribute to the overall success and sustainable competitive advantage of any business within the global market place.

PLEASE BASE YOUR JUDGEMENTS ON THE **INDUSTRY** IN WHICH YOU **HAVE MOST EXPERIENCE**. Your sincere and honest opinion of what works in practice, rather than what is reflected in theory, is of great importance.

PLEASE COMPLETE ALL THE QUESTIONS ON EACH PAGE BEFORE TURNING TO THE NEXT PAGE. DO NOT RETURN TO PREVIOUS QUESTIONS UNLESS INSTRUCTED TO DO SO.

This questionnaire should take approximately 10 minutes to complete.

SECTION A: DEFINITION OF SUSTAINABLE COMPETITIVE ADVANTAGE

A sustainable competitive advantage (SCA) is the:

- *on-going superior financial and market performance a business will gain*
- *from conceiving and implementing a value-creating strategy;*
- *not simultaneously being implemented by any current or potential competitors*
- *Performance and success is therefore measured in terms of four items:*
  - *return of capital employed,*
  - *market share,*
  - *sales growth and*
  - *management's assessment of overall company performance.*

You are required to answer two questions in this section:

A1 *List at least eight (8) factors which you would consider when doing future planning to create sustainable competitive advantages (SCA) for a firm in your industry sector or for your SBU.*

A2 *Please use the column provided below, to prioritize the factors you have listed. Starting with 1 representing the most important factor and 8 representing the least important factor.*

	Priority rating for question A2
1	
2	
3	
4	
5	
6	
7	
8	

SECTION B

*In this section you will again be required to answer two questions, but this time you have to **complete question B in whole before proceeding to the instructions given for question C,** which will have to be completed on this page.*

Please select the 8 most likely factors you or your business will take into consideration when formulating a strategic plan to create Sustainable Competitive Advantage(s) for a firm in your industry sector. Place a check (✓) in column B.

	B Most likely factors	***Ratings Scale for question C**** 0= Not important, 10 = Extremely Important
Preferred Positioning in terms of Industry Category or Sector	✓	0 1 2 3 4 5 6 7 8 9 10
Preferred Positioning in terms of Corporate & Brand Reputation and Image	✓	0 1 2 3 4 5 6 7 8 9 10
Ethics & Values	✓	0 1 2 3 4 5 6 7 8 9 10
Internal Communication & Co-ordination	✓	0 1 2 3 4 5 6 7 8 9 10
Market & Competitive Orientation	✓	0 1 2 3 4 5 6 7 8 9 10
Innovation & Creativity	✓	0 1 2 3 4 5 6 7 8 9 10
Direction & Goals	✓	0 1 2 3 4 5 6 7 8 9 10
Motivation as promoted through Recognition		0 1 2 3 4 5 6 7 8 9 10
Personnel Attitude, Drive & Energy		0 1 2 3 4 5 6 7 8 9 10
Stakeholders & Constituents		0 1 2 3 4 5 6 7 8 9 10
Networks & Alliances		0 1 2 3 4 5 6 7 8 9 10
Productivity and Time management		0 1 2 3 4 5 6 7 8 9 10
Access to financial resources		0 1 2 3 4 5 6 7 8 9 10
Strategic Investments & Projections		0 1 2 3 4 5 6 7 8 9 10
Technology		0 1 2 3 4 5 6 7 8 9 10
Data & Information Management		0 1 2 3 4 5 6 7 8 9 10
Leadership Competencies Management's Ability to steer Change Direction & Strategic Leadership		0 1 2 3 4 5 6 7 8 9 10
People Embodied Skills and Competencies Experience, Skills, Knowledge Talents		0 1 2 3 4 5 6 7 8 9 10
Technology Embodied Competencies		0 1 2 3 4 5 6 7 8 9 10
Ability to Adapt and change/Flexibility		0 1 2 3 4 5 6 7 8 9 10

COMPLETE SECTION B BEFORE TURNING FOR INSTRUCTIONS TO SECTION C ON THE NEXT PAGE.

Complete question C on this grid. *

SECTION C:

Please rate the importance of the eight (8) factors you have selected above in terms of the priority you would place on each and the role they play in creating sustainable competitive advantages (SCA). Please use a rating scale between 0 and 10, where 0 = Not Important at all and 10 = Extremely Important. You may also use any number in between to indicate the importance you attach to a particular factor. **Please encircle the rating of your choice on the previous page, in the column marked C*.**

SECTION D:

The following 4 factors summarize the concepts listed under B and C:

- ***Market Positioning*** - Positioning the firm achieves or obtains in the mind of all constituents
- ***Finite Resources***- Limited tangible resources such as machines, time, money, etc.
- ***Infinite Resources*** - Unlimited and infinitely available resources such as passion, energy, direction, motivation, innovation, flexibility, self-drive, goal-orientation, etc.
- ***Competencies and Capabilities*** - Human and technological embodied skills, experience and knowledge to which the business has access.

Please assess the following factors/constructs in terms of their ability/ in-ability to contribute to a firm's sustainable competitive advantage.

	Do not agree at all				*Totally Agree*
Preferred Market Positioning can contribute to competitive advantage(s) in the marketplace.	*1*	*2*	*3*	*4*	*5*
Access to Superior Finite Resources can contribute to competitive advantage(s) in the marketplace	*1*	*2*	*3*	*4*	*5*
Exploiting Infinite Resources can contribute to competitive advantage(s) in the marketplace	*1*	*2*	*3*	*4*	*5*
Access to *Superior Competencies & Capabilities* can contribute to competitive advantage(s) in the marketplace	*1*	*2*	*3*	*4*	*5*

DO NOT TURN THE PAGE BEFORE YOU HAVE COMPELETED THE QUESTIONS ON THIS PAGE.

SECTION E:

Please rank the same four (4) factors in terms of the priority you would place on each, in terms of the role they play in creating sustainable competitive advantage (SCA) for your business or industry. Please use a 0 to 10 scale, where 0 = Not important at all and 10 = Extremely important. You may also use any number in between that best describes the priority you attach to the factor.

	Not important at all										Extremely Important
Preferred Market Positioning can contribute to competitive advantage(s) in the marketplace	0	1	2	3	4	5	6	7	8	9	10
Access to Superior Finite Resources can contribute to competitive advantage(s) in the marketplace	0	1	2	3	4	5	6	7	8	9	10
Exploiting Infinite Resources can contribute to competitive advantage(s) in the marketplace	0	1	2	3	4	5	6	7	8	9	10
Access to S*uperior Competencies & Capabilities* can contribute to competitive advantage(s) in the marketplace	0	1	2	3	4	5	6	7	8	9	10

SECTION F – CLASSIFICATION DETAILS

Please complete this table by writing the correct answer in the box next to each statement or by checking (✓) the correct option	You unique answer
Your degree program (BBA, MPA, MBA, etc.)	
Your age	
Gender	Male Female
How many years work experience?	
In which industry of business do you have most experience?	
How many years management experience?	
How many years experience do you have in marketing or as a marketing practitioner?	

Thank you for your valuable time.

APPENDIX B

table Question A1 and A2

	CONCEPT METIONED BY RESPONDENT	# Mentions	Highest Rating 1= High, 8=Low	Median	Average Rating
a1	Preferred Positioning i.t.o. industry category	4.0	2.0	2.5	**2.5**
a2	Preferred Positioning i.t.o. brand image	13.0	1.0	2.0	**3.3**
a3	Ethics and values	0.0	0.0	0.0	0.0
a7	Strategic Direction & Goals	18.0	1.0	4.0	3.8
a28	Demand, Market Share & Growth Potential	**24.0**	1.0	3.0	**3.4**
a21	Benchmarking against other firms	2.0	3.0	5.0	5.0
a32	Niche marketing	3.0	4.0	4.0	5.0
a33	Patents, IP, Protection & Barriers to Entry	16.0	1.0	3.0	3.8
a38	Time to launch, Duration of advantage	13.0	1.0	5.0	3.5
a40	Macro environmental issues	11.0	2.0	4.0	4.7
a41	Risk	4.0	2.0	4.5	4.3
	Averages for Category on Perceived Perception	9.8	1.6	3.4	3.6
	Total for Category on Preferred Positioning	**108.0**			
a16	Data & Information Management	0.0	0.0	0.0	0.0
a10	Stakeholders & Constituents	0.0	0.0	0.0	0.0
a11	Networks & Alliances	8.0	1.0	5.0	4.5
a12	Productivity & Time Management	7.0	1.0	3.0	3.6
a13	Access to Financial Resources	21.0	1.0	5.0	4.3
a14	Strategic Investments & Projections	17.0	1.0	5.0	5.2
a22	Supplier proximity & Supplier Power	12.0	4.0	6.0	6.3
a23	Substitutes	4.0	4.0	4.5	5.3
a24	Cost Structures	**23.0**	1.0	4.0	4.1
a25	Market Trends	9.0	2.0	4.0	4.2
a26	Market Research	10.0	1.0	5.5	4.9
a27	Competitors & Competitive Reactions	20.0	1.0	4.0	4.2
a29	Product Diversification	14.0	2.0	5.0	4.9
a30	Quality Issues	13.0	1.0	6.0	5.2
a31	Service Level	5.0	3.0	6.0	5.2
a37	Economies of Scale and Scope	5.0	1.0	3.0	3.8
a39	Distribution Issues	7.0	2.0	6.0	5.4
a42	Location	2.0	1.0	3.5	3.5
a34	Market Share	9.0	1.0	4.0	4.3
a35	R&D	5.0	1.0	3.0	4.0
	Averages for Category on Finite Resources	14.2	1.5	4.1	4.1
	Total for Category on Finite Resources	**299.0**			
a4	Internal Communication & Co-ordination	3.0	2.0	5.0	4.7
a5	Market & Competitive Orientation	**25.0**	1.0	3.0	3.8
a6	Innovation & Creativity	9.0	2.0	4.0	4.2
a20	Flexibility & Responsiveness	4.0	3.0	7.0	6.3
a8	Motivation & Recognition	4.0	1.0	3.5	3.8
a9	Attitude, Drive & Energy	2.0	1.0	3.0	**3.0**
	Averages for Category on Infinite Resources	7.8	1.7	4.3	4.3
	Total for Category on Infinite Resources	**47.0**			
a15	Technology	6.0	2.0	3.0	**3.2**
a17	Leadership Competencies	12.0	1.0	3.0	**3.3**
a18	Core Competencies/Capabilities	**31.0**	1.0	4.0	4.0
a19	Technology Embodied Competencies	1.0	6.0	6.0	6.0
a36	Employee Competence & Buy-in	5.0	6.0	7.0	6.8
	Averages for Category on Competencies	11.0	3.2	4.6	4.7
	Total for Category on Competencies	**55.0**			
	TOTAL for ALL RESPONDENTS AND ALL SCA SOURCES MENTIONED	509.0			

	# Mentions	Highest Rating 1= High, 8=Low	Median	AverageRating

Question A by tot # Experience and PP/FR/IR/C

Responder Age	# Years Ex	Industry	Man Exp	Mkt Expe	Inv of Scor pp	Inverse/Re: fr	Inverse/res ir	Inverse c
resp 3	52	30 US Military	25	0	5	3	4	8
resp15	47	25 Agriculture	25	20	8	6	0	0
resp 48	42	24 Airlines	8	0	1	8	4	5
resp 11	43	21 Medical De	16	2.5	7	5	0	8
resp 16	42	21 Technology	12	0	4	7	0	5
resp 17	42	20 Engineerin	10	0	8	5	0	1
resp 54	42	20 Energy	5	0	0	8	0	6
resp 39	40	20 Software	15	2	8	7	1	5
resp 35	40	19 Oil & gas	0	0	6	8	0	0
resp 9	44	18 Hydrocarbc	10	0	8	6	0	4
resp 52	43	18 Healthcare	14	0	5	8	0	0
resp 5	40	17 Oil & gas	10	0	8	8	1	4
resp 20	40	17 Energy	8	7	8	8	6	7
resp 56	40	16 High Tech	10	7	7	5	6	8
resp 36	38	14 Non-Profit	4	0	7	6	5	8
resp 28	36	14 manufactur	10	0	7	8	6	0
resp 53	35	14 Law	5	0	5	6	8	7
resp 10	38	13 Engineerin	6	6	8	5	7	6
resp12	37	13 IT	8	5	7	5	8	0
resp 4	36	13 Petro Chen	6	5	1	3	0	0
resp 14	42	12 Electronics	3	0	8	4	0	8
resp 18	38	12 Law	12	0	6	7	8	0
resp 19	35	12 Nuclear Sc	2	0	6	7	8	4
resp 47	33	12 Semicondu	0	0	5	8	6	7
resp 30	34	11 Energy	5	2	8	7	6	0
resp13	33	11 Financing	5	0	7	8	2	0
resp 25	33	11 IT	8	10	4	5	7	8
resp 37	33	11 Energy	11	0	0	8	0	6
resp 32	32	11 Petro Chen	2	1	8	7	3	0
resp 51	32	11 Oil & gas	6	3	8	5	7	6
resp 31	31	11 Industrial	4	1	8	5	0	0
resp 49	40	10 Healthcare	5	0	7	6	0	8
resp 26	36	10 manufactur	10	0	6	8	0	0
resp 7	32	10 IT	5	2	8	7	0	2
resp 23	31	10 IT	6	1	0	6	7	0
Resp 1	31	9 High Tech	9	5	6	5	7	8
resp 40	35	8 PCs	4	0	7	4	6	2
resp 22	33	8 Law	8	0	5	8	0	3
resp 21	32	8 Semicondu	3	0	7	6	0	1
Resp2	31	8 Public Acc	3	0	8	7	0	0
resp 27	31	8 Chemical	3	3	8	7	0	6
resp 38	31	8 Industrial &	0	2	6	8	0	0
resp 44	30	8 Energy	5	2	0	7	0	8
resp 8	29	8 Software	2.5	6	1	8	0	5
resp 42	29	8 Chemical	4	0	5	7	8	4
resp 50	29	8 Energy	0	3	4	8	0	0
resp 46	30	7 Telecommu	4	7	8	5	4	6
resp 41	29	7 Technology	0	1	6	8	4	1
resp 55	28	7 Chemical	2	5	7	6	4	8
resp 45	28	6.5 Software	3	2	5	8	3	6
resp 33	32	6 High Tech	0	1.5	8	5	0	4
resp 6	31	6 Medical De	5	3	8	7	2	0
resp 57	28	6 Professiona	3	0	6	4	8	0
resp 43	27	6 Chemical	2	0	7	8	5	8
resp 24	28	5 Industrial	2	0	8	7	5	0
resp 29	27	5 Financing	2	0	5	7	8	6
resp 34	26	5 Energy	1	0	4	2	5	8
	34.85965	Average/M	6.254386	2.017544	5.894737	6.438596	3.140351	3.77193
		Median	5	0.5	7	7	3	4
		TOT # of Mentions			108	191	44	55

Question A: INDUSTRY: PP/FR/IR/C Total number of respondents with certain rating

AE1	0 not impo	1	2	3	4	5	6	7	8 very NB
Chemical	0	0	0	0	0	1	1	2	2
Energy	3	0	0	0	2	0	0	0	2
Industrial&	0	0	0	0	0	0	2	1	2
Oil, Gas &	0	1	0	0	0	0	1	0	3
IT	1	1	0	0	2	2	2	4	5
Services	0	1	0	0	0	4	2	3	4
Other	0	0	0	0	0	1	0	1	1
	4	3	0	0	4	8	8	11	19

AE1	0<X<4	4	4<X<8
Chemical	0	0	6
Energy	3	2	2
Industrial&	0	0	5
Oil, Gas &	1	0	4
IT	2	2	13
Services	1	0	13
Other	0	0	3
	7	4	46

AE2	0	1	2	3	4	5	6	7	8
Chemical	0	0	0	0	0	0	2	3	1
Energy	0	0	1	0	0	0	0	2	4
Industrial&	0	0	0	0	0	1	0	1	3
Oil, Gas &	0	0	0	1	0	1	0	1	2
IT	0	0	0	0	2	6	1	3	5
Services	0	0	0	0	1	3	2	4	4
Other	0	0	0	0	1	0	2	0	0
	0	0	1	1	4	11	7	14	19

AE2	0<X<4	4	4<X<8
Chemical	0	0	6
Energy	1	0	6
Industrial&	0	0	5
Oil, Gas &	1	0	4
IT	0	2	15
Services	0	1	13
Other	0	1	2
	2	4	51

AE3	0	1	2	3	4	5	6	7	8
Chemical	2	0	0	0	1	1	0	0	2
Energy	4	0	0	0	0	1	2	0	0
Industrial&	3	0	0	0	0	1	1	0	0
Oil, Gas &	2	1	0	1	0	0	0	1	0
IT	6	1	0	1	2	0	3	3	1
Services	6	0	2	0	1	0	0	1	4
Other	1	0	0	0	1	1	0	0	0
	24	2	2	2	5	4	6	5	7

AE3	0<X<4	4	4<X<8
Chemical	2	1	3
Energy	4	0	3
Industrial&	3	0	2
Oil, Gas &	4	0	1
IT	8	2	7
Services	8	1	5
Other	1	1	1
	30	5	22

AE4	0	1	2	3	4	5	6	7	8
Chemical	0	0	0	0	3	0	1	0	2
Energy	2	0	0	0	0	0	2	1	2
Industrial&	5	0	0	0	0	0	0	0	0
Oil, Gas &	3	0	0	0	1	0	1	0	0
IT	2	2	2	0	1	3	2	1	4
Services	6	1	0	1	0	1	2	1	2
Other	1	0	0	0	0	0	0	0	2
	19	3	2	1	5	4	8	3	12

AE4	0<X<4		4	4<X<8
Chemical	0		3	3
Energy	2		0	5
Industrial&	5		0	0
Oil, Gas &	3		1	1
IT	6		1	10
Services	8		0	6
Other	1		0	2
	25		5	27

Question A: MKT XPERIENCE Total number of respondents with certain rating

AE1/PP	0 not impor	1	2	3	4	5	6	7 8 very NB	tot	
>=3YEAR:	0	2	0	0	2	0	1	3	7	15
< 3 Years	4	1	0	0	2	9	6	8	12	42
TOTAL	4	3	0	0	4	9	7	11	19	57

AE1/SMAL	0<X<4	4 4<X<8		
>3,	2	2	11	15
<3	5	2	35	42
Total	7	4	46	57

AE2/FR	0 not impor	1	2	3	4	5	6	7 8 very NB	tot	
>=3YEAR:	0	0	0	1	0	7	2	2	3	15
< 3 Years	0	0	0	2	3	4	7	10	16	42
TOTAL	0	0	0	3	3	11	9	12	19	57

AE2/FR C(	0<X<4	4 4<X<8		
>3,	1	0	14	15
<3	2	3	37	42
Total	3	3	51	57

AE3/IR	0 not impor	1	2	3	4	5	6	7 8 very NB	tot	
>=3YEAR:	5	0	1	0	2	0	2	4	1	15
< 3 Years	19	2	1	2	3	4	4	1	6	42
TOTAL	24	2	2	2	5	4	6	5	7	57

AE3/IR CO	0<X<4	4 4<X<8		
>3,	6	2	7	15
<3	24	3	15	42
Total	30	5	22	57

AE4/C	0 not impor	1	2	3	4	5	6	7 8 very NB	tot	
>=3YEAR:	5	0	0	0	0	1	4	1	4	15
< 3 Years	14	3	2	3	3	3	4	2	8	42
TOTAL	19	3	2	3	3	4	8	3	12	57

AE4/C CO	0<X<4	4 4<X<8		
>3,	5	0	10	15
<3	22	3	17	42
Total	27	3	27	57

APPENDIX C

Question C; by INDUSTRY TYPE; Averages for Combined PP/FR/IR/C

Responder	Age	# Years Ex	Industry	Man Exp	Mkt Expe	average pp	Highest rat	c7 dir and	c1 Preferre	c2 brand	c3 ethics a	Average FI	FR Highes	c16 data &
resp 27	31	8	Chemical	3	3	8.0	8.0				8.0	9.0	10.0	
resp 42	29	8	Chemical	4	0	9.3	10.0		8.0		10.0	8.0	8.0	
resp 43	27	6	Chemical	2	0	9.0	9.0			9.0		8.7	9.0	
resp 55	28	7	Chemical	2	5	das	cxz					10.0	10.0	
resp 9	44	18	Hydrocarb	10	0	9.7	10.0	10.0			9.0	ads	asd	
resp 19	35	12	Nuclear Sc	2	0	10.0	10.0		10.0			7.8	9.0	
	9.8			3.8	1.3	9.2	9.4	10.0	9.0	9.0	9.0	8.7	9.2	0.0
resp 20	40	17	Energy	8	7	7.7	8.0	7.0	8.0			9.0	9.0	
resp 30	34	11	Energy	5	2	7.7	8.0	7.0		8.0		9.0	9.0	
resp 34	26	5	Energy	1	0	9.0	9.0				9.0	8.0	8.0	
resp 37	33	11	Energy	11	0	4.3	6.0	6.0	4.0	1.0		9.7	10.0	
resp 44	30	8	Energy	5	2	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
resp 50	29	8	Energy	0	3	das	zcxz					9.8	10.0	
resp 54	42	20	Energy	5	0	10.0	10.0				10.0	6.7	7.0	
	11.4			5.0	2.0	8.1	8.5	7.5	7.3	6.3	9.5	8.9	9.0	0.0
resp 26	36	10	manufactu	10	0	7.5	10.0	3.0	10.0	7.0		9.0	9.0	
resp 28	36	14	manufactu	10	0	6.0	6.0	6.0	6.0			8.0	9.0	6.0
resp 38	31	8	Industrial &	0	2	6.0	6.0			6.0		8.8	9.0	
resp 24	28	5	Industrial	2	0	7.7	8.0		7.0	8.0		8.8	10.0	
resp 31	31	11	Industrial	4	1	9.0	9.0			9.0		9.3	10.0	10.0
	9.6			5.2	0.6	7.2	7.8	4.5	7.7	7.5	ads	8.8	9.4	8.0
resp 4	36	13	Petro Cher	6	5	8.3	10.0	10.0			5.0	5.3	7.0	
resp 32	32	11	Petro Cher	2	1	6.0	6.0		6.0	6.0		9.4	10.0	
resp 5	40	17	Oil & gas	10	0	7.3	8.0		8.0	6.0		9.0	9.0	
resp 35	40	19	Oil & gas	0	0	9.0	9.0		9.0			9.5	10.0	8.0
resp 51	32	11	Oil & gas	6	3	9.0	9.0			9.0		9.7	10.0	9.0
	14.2			4.8	1.8	7.9	8.4	10.0	7.7	7.0	5.0	8.6	9.2	8.5
resp 7	32	10	IT	5	2	10.0	10.0	10.0				10.0	10.0	
resp12	37	13	IT	8	5	adsf	zcxz					8.3	9.0	7.0
resp 23	31	10	IT	6	1	7.0	7.0		7.0			7.7	8.0	
resp 25	33	11	IT	8	10	9.0	9.0		9.0			8.0	9.0	
resp 40	35	8	PCs	4	0	8.0	8.0			8.0		7.0	7.0	
resp 46	30	7	Telecomm	4	7	8.0	8.0	8.0	8.0	8.0		7.0	7.0	
resp 16	42	21	Technolog	12	0	7.7	8.0	7.0		8.0		7.7	8.0	
resp 41	29	7	Technolog	0	1	7.0	7.0	7.0				6.7	7.0	
resp 8	29	8	Software	2.5	6	10.0	10.0		10.0	10.0	ads	ac		
resp 39	40	20	Software	15	2	10.0	10.0			10.0		6.7	7.0	
resp 45	28	6.5	Software	3	2	adsf	zcxz					7.3	8.0	
resp 21	32	8	Semicondu	3	0	7.0	7.0				7.0	8.0	8.0	
resp 47	33	12	Semicondu	0	0	8.0	8.0		8.0			5.7	6.0	
Resp 1	31	9	High Tech	9	5	9.7	10.0	9.0	10.0			7.3	8.0	
resp 33	32	6	High Tech	0	1.5	8.7	9.0	9.0		8.0		8.7	9.0	
resp 56	40	16	High Tech	10	7	8.7	9.0		8.0	9.0		8.0	8.0	
resp 14	42	12	Electronics	3	0	7.7	10.0	10.0			3.0	9.0	9.0	
	10.9			5.4	2.9	8.4	8.7	8.6	8.6	8.7	5.0	7.7	8.0	7.0
resp 18	38	12	Law	12	0	8.5	10.0	10.0	7.0	7.0		9.0	9.0	
resp 22	33	8	Law	8	0	8.0	8.0				8.0	8.3	9.0	
resp 53	35	14	Law	5	0	9.3	10.0	8.0	10.0			8.7	9.0	
resp 6	31	6	Medical De	5	3	asd	zcxz					6.0	7.0	
resp 11	43	21	Medical De	16	2.5	8.5	10.0		5.0	9.0	10.0	6.0	6.0	
resp 49	40	10	Healthcare	5	0	7.0	8.0	5.0			8.0	8.0	8.0	
resp 52	43	18	Healthcare	14	0	8.5	9.0		8.0	8.0	9.0	8.3	9.0	
resp13	33	11	Financing	5	0	8.0	8.0		8.0			9.0	10.0	
resp 29	27	5	Financing	2	0	10.0	10.0		10.0	10.0		7.0	8.0	
resp 10	38	13	Engineerin	6	6	9.7	10.0	10.0			9.0	dsa	ac	
resp 17	42	20	Engineerin	10	0	7.6	10.0	10.0	7.0	6.0	5.0	6.7	8.0	
Resp2	31	8	Public Acc	3	0	9.0	9.0		9.0		9.0	8.7	9.0	
resp 57	28	6	Profession	3	0	9.3	10.0	10.0		8.0		9.0	9.0	9.0
resp 48	42	24	Airlines	8	0	7.5	8.0		8.0	7.0	7.0	8.0	9.0	7.0
	12.6			7.3	0.8	8.5	9.2	8.8	8.0	7.9	8.1	7.9	8.5	8.0
resp 36	38	14	Non-Profit	4	0	8.0	8.0			8.0		10.0	10.0	
resp 3	52	30	US Military	25	0	9.7	10.0		9.0		10.0	8.0	8.0	
resp15	47	25	Agriculture	25	20	8.3	10.0		10.0		5.0	9.0	9.0	
	23.0			18.0	6.7	8.7	9.3	0.0	9.5	8.0	7.5	9.0	9.0	0.0
	18.40351		Average	4.354858	1.287717	8.5	9.0	0.0	8.5	8.3	7.4	7.9	8.2	0.0
			# Mentions				94.0	14.0	18.0	16.0	14.0		108.0	4.0
			Median				9.0	8.9	8.0	8.0	8.0		8.0	7.5
			Total mentions											

c10 stakeh	c11 allianc	c12 produc	c13 Acces	c14 str inv	average IR	Highest rat	C20 Ability	c4 int comi	c5 market	c6 innovati	c8 motivati	c9 attitude	Average C	Highest rat
10.0	7.0				10.0	10.0			10.0	10.0			9.0	10.0
8.0					9.0	10.0			10.0	7.0			9.0	10.0
		9.0	8.0		9.0	9.0				9.0			8.4	9.0
	10.0			10.0	9.2	10.0	9.0		10.0	8.0		9.0	7.0	8.0
					8.4	9.0	8.0	8.0		8.0		9.0	9.3	10.0
6.0		7.0		9.0	9.3	10.0	9.0		10.0	8.0			5.0	5.0
8.0	8.5	8.0	8.0	9.5	9.1	9.7	8.7	8.0	10.0	8.3	0.0	9.0	8.0	8.7
				9.0	9.0	10.0		10.0		10.0	6.0		9.0	9.0
				9.0	7.8	8.0	8.0		7.0			8.0	9.0	9.0
			8.0		9.4	10.0		9.0	9.0	10.0		9.0	9.7	10.0
			9.0	10.0 ads	asd								9.3	10.0
				10.0	10.0	10.0	10.0		10.0	10.0			10.0	10.0
10.0		9.0	10.0		9.3	10.0	9.0			10.0		8.0	9.7	10.0
	6.0		7.0		9.0	9.0	9.0						8.2	9.0
10.0	6.0	9.0	8.5	9.5	9.1	9.5	9.0	9.5	8.7	10.0	6.0	8.3	9.3	9.6
	9.0				6.0	8.0			8.0	2.0			4.7	5.0
		8.0	9.0		9.0	9.0			9.0			9.0	9.0	9.0
		8.0	9.0	9.0	7.8	9.0	9.0			7.0		6.0	10.0	10.0
	10.0		9.0	6.0	10.0	10.0			10.0				9.3	10.0
	7.0		10.0		7.8	10.0	6.0			10.0	5.0		10.0	10.0
das	8.7	8.0	9.3	7.5	8.1	9.2	7.5 ads		9.0	6.3	5.0	7.5	8.6	8.8
.2.0			7.0		9.7	10.0		9.0	10.0				10.0	10.0
9.0	8.0		10.0	10.0	6.0	6.0	6.0						9.0	9.0
				9.0	6.0	6.0			6.0				7.6	9.0
			10.0	10.0	5.3	6.0	4.0			6.0			8.0	9.0
		10.0			9.3	10.0		8.0	9.0			10.0	9.0	10.0
5.5	8.0	10.0	9.0	9.7	7.3	7.6	5.0	8.5	8.3	6.0	0.0	10.0	8.7	9.4
10.0			10.0		10.0	10.0	10.0		10.0				10.0	10.0
	8.0		9.0		8.0	8.0			8.0	8.0			8.8	10.0
	7.0			8.0	8.7	9.0			9.0			8.0	8.5	9.0
	6.0		9.0		8.0	9.0		7.0	7.0	9.0			9.7	10.0
		7.0			8.3	9.0				9.0		7.0	8.4	9.0
				7.0	9.8	10.0	9.0		10.0	10.0			6.0	6.0
7.0		8.0			10.0	10.0			10.0				8.5	9.0
6.0				7.0	8.2	10.0	5.0		8.0	8.0		10.0	8.0	8.0
					9.7	10.0			10.0	9.0			9.8	10.0
6.0	7.0				9.0	9.0			9.0	9.0			9.3	10.0
	6.0		8.0		8.0	9.0	6.0			9.0			8.4	9.0
		8.0			8.3	9.0			8.0	9.0		7.0	8.7	9.0
6.0	5.0				9.0	9.0			9.0				9.0	10.0
7.0	6.0		8.0		9.0	10.0			10.0	7.0			6.0	6.0
			8.0	9.0	9.3	10.0			8.0	10.0			9.7	10.0
	8.0				8.5	9.0	9.0		9.0	7.0			8.7	9.0
				9.0	7.0	7.0			7.0				6.3	8.0
7.0	6.6	7.7	8.7	8.0	8.7	9.2	7.8	7.0	8.8	8.7	0.0	8.0	8.4	8.9
	9.0		9.0	9.0	8.3	10.0			5.0			10.0 ads	zxcc	
	7.0		9.0		8.6	10.0	7.0		7.0	9.0		10.0	5.0	5.0
			8.0	9.0	9.7	10.0			10.0	9.0			10.0	10.0
	7.0		4.0		7.3	9.0	9.0	5.0	6.0				9.3	10.0
6.0					5.0	5.0				5.0			9.3	10.0
		8.0			5.8	8.0		4.0	3.0			8.0	9.3	10.0
9.0		7.0	8.0	asd	ads								7.0	7.0
8.0			8.0	10.0	8.5	9.0	8.0			8.0		9.0	10.0	10.0
	6.0	8.0	6.0		8.7	9.0			8.0			9.0	10.0	10.0
					9.8	10.0	10.0		10.0		9.0		8.5	9.0
4.0				8.0	9.0	9.0			9.0				3.0	3.0
		9.0		8.0	9.7	10.0	9.0		10.0				8.7	9.0
9.0					8.7	9.0	8.0		9.0				9.7	10.0
			9.0	7.0	8.0	8.0			8.0				8.0	8.0
7.2	7.3	8.0	7.6	8.5	8.2	8.9	8.5	4.5	7.7	7.8	9.0	9.2	8.3	8.5
10.0			10.0		8.8	10.0	7.0	8.0				10.0	9.0	9.0
			8.0		9.5	10.0				9.0	9.0	10.0	9.0	10.0
			9.0		6.0	6.0	6.0						6.0	7.0
10.0	0.0	0.0	9.0	0.0	8.1	8.7	6.5	8.0	0.0	9.0	9.0	10.0	8.0	8.7
7.3	6.2	7.1	8.1	7.7	8.4	9.1	7.7	6.1	0.0	8.4	0.0	9.2	8.2	8.6
13.0	11.0	8.0	16.0	12.0		126.0	14.0	5.0	24.0	16.0	4.0	11.0		121.0
7.0	7.0	8.0	8.0	8.3		9.0	8.0	5.0	8.9	9.0	9.0	9.2		9.0

c15 techno	c17 Leade	c18 People	c19 Techn skills
	10.0	7.0	
8.0	10.0	8.0	
8.0	9.0	8.0	8.0
8.0			5.0
	8.0	10.0	
5.0			
7.3	9.3	8.3	6.5
9.0	9.0		
	9.0	9.0	
	9.0	10.0	
7.0		10.0	10.0
	10.0		
	10.0	9.0	
7.0	8.0	8.0	9.0
7.7	9.2	9.2	9.5
4.0			5.0
	9.0		
		10.0	
	8.0	10.0	
10.0			
7.0	8.5	10.0	5.0
	10.0	10.0	
		9.0	
9.0	8.0	6.0	6.0
9.0		6.0	
7.0		10.0	
8.3	9.0	8.2	6.0
10.0	10.0	10.0	
7.0	10.0	8.0	
	9.0	9.0	7.0
10.0	9.0		
9.0	8.0	7.0	9.0
6.0			
8.0	8.0	9.0	
8.0			
10.0	10.0	9.0	10.0
9.0	8.0	10.0	
9.0	8.0	9.0	7.0
8.0	9.0		
10.0		7.0	9.0
6.0			
	9.0		10.0
8.0			9.0
5.0	8.0	4.0	
8.2	8.8	8.2	8.7
5.0			
	10.0	10.0	
8.0		10.0	
7.0	10.0	10.0	
		10.0	8.0
	7.0	7.0	
	10.0		
	10.0		
7.0	9.0	9.0	
		3.0	
		9.0	8.0
	10.0	9.0	
8.0			
7.0	9.4	8.6	8.0
	9.0	9.0	
	10.0	7.0	
4.0	7.0		
4.0	8.7	8.0	0.0
7.3	8.9	8.3	0.0
19.0	19.0	19.0	9.0
8.0	9.0	9.0	8.7

Comparison of Analysis methodologies discussed in Chapter 4, section 3.1

Question C	C1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
Average	3.55	4.12	3.56	5.11	2.72	3.45	3.62	6	3.21	4.33	5.05	3.85	3.52	3.09	4.09	4.29	2.33	3.16	3.53	4.17
Frequency	29	26	18	9	39	31	21	4	19	18	19	13	29	22	33	7	36	37	15	24
Sum/57	1.81	1.88	1.12	0.81	1.86	1.88	1.33	0.42	1.07	1.37	1.68	0.88	1.79	1.19	2.37	0.53	1.47	2.05	0.93	1.75
Frequency	29	26	18	9	39	31	21	4	19	18	19	13	29	22	33	7	36	37	15	24

Graph C1 : New Tables for Responses to Question C; Averge Priority Rating over all respondents for prompted sources

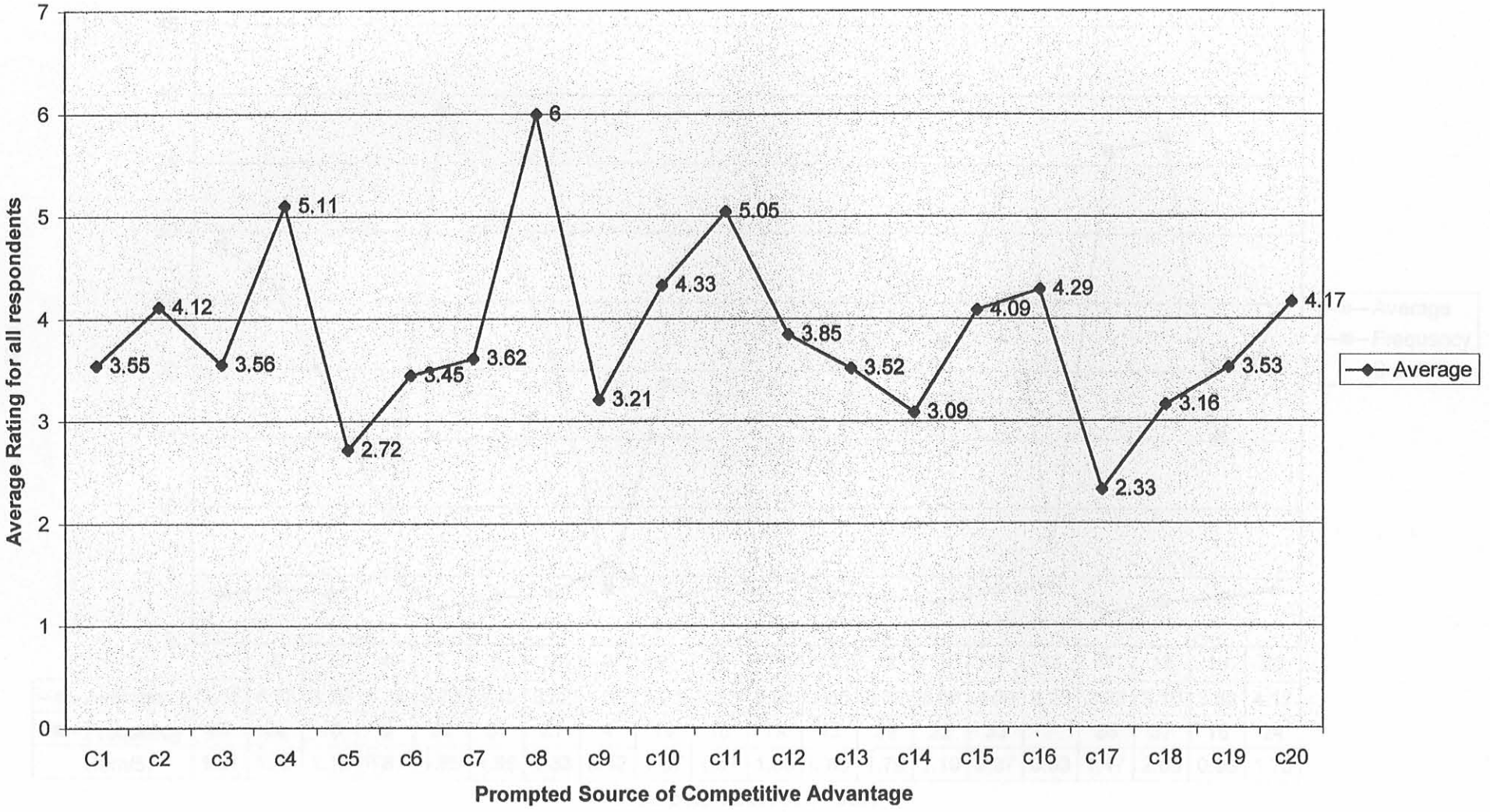
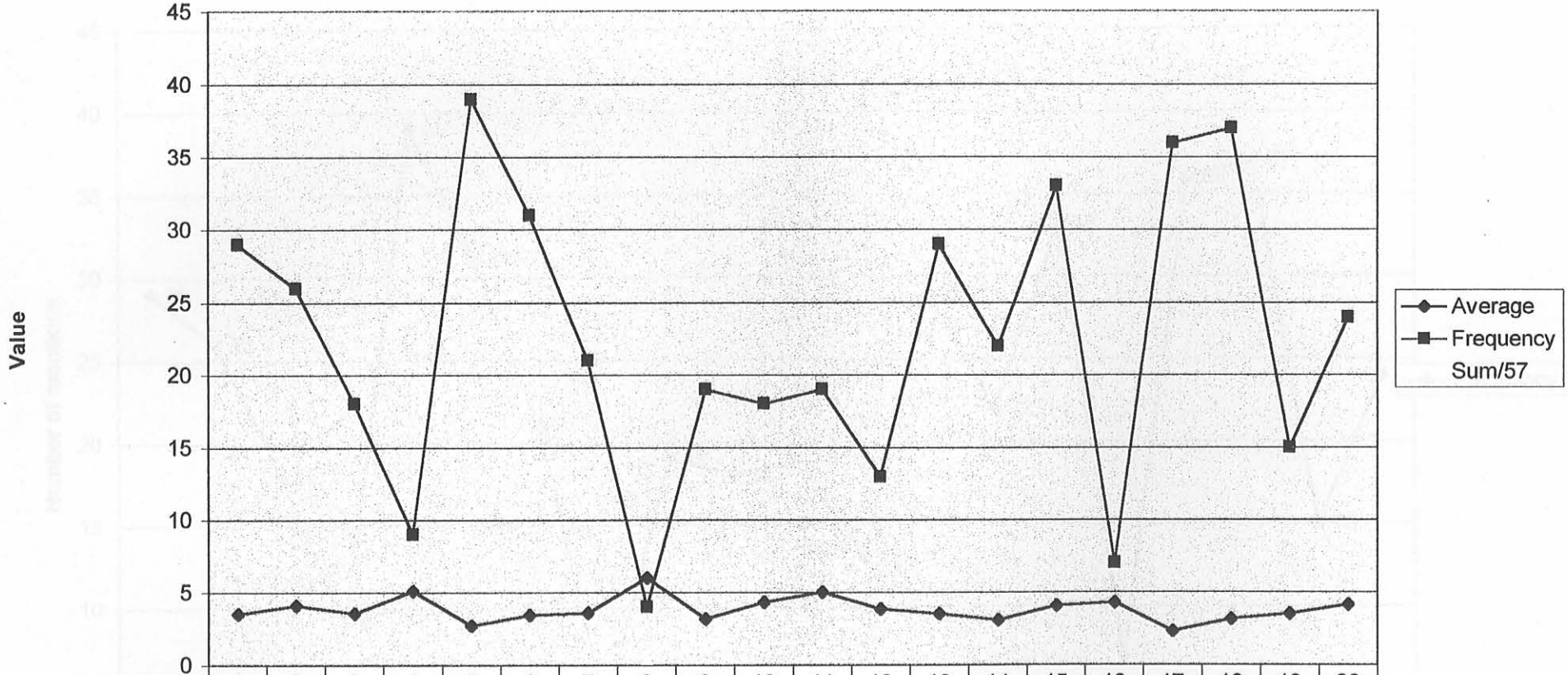


Chart C2: Average, Frequency and Overall averge for Question C, Prompted Sources



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Average	3.55	4.12	3.56	5.11	2.72	3.45	3.62	6	3.21	4.33	5.05	3.85	3.52	3.09	4.09	4.29	2.33	3.16	3.53	4.17
Frequency	29	26	18	9	39	31	21	4	19	18	19	13	29	22	33	7	36	37	15	24
Sum/57	1.81	1.88	1.12	0.81	1.86	1.88	1.33	0.42	1.07	1.37	1.68	0.88	1.79	1.19	2.37	0.53	1.47	2.05	0.93	1.75

Graph C3: Number of Mentions for Prompted Sources of SCA

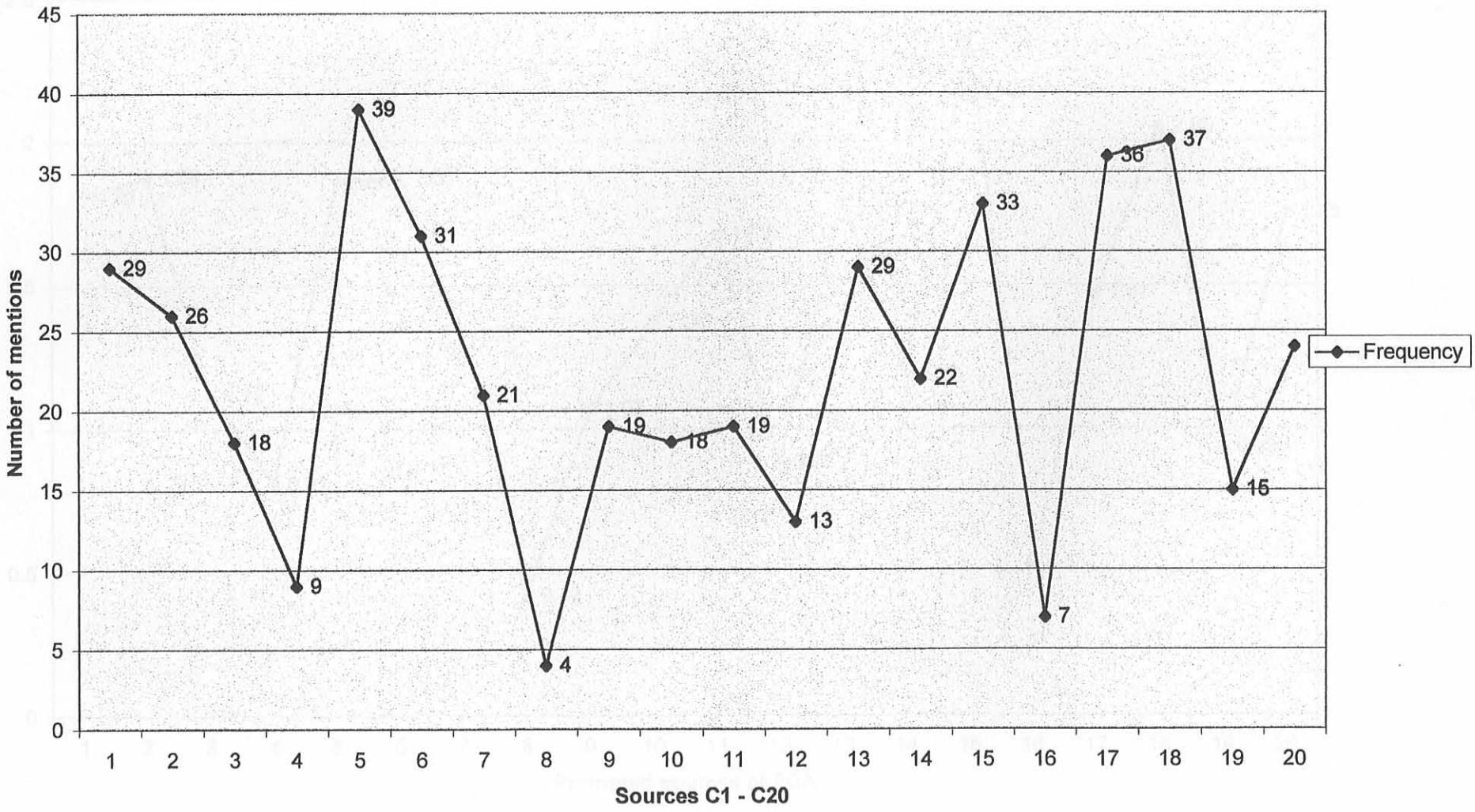
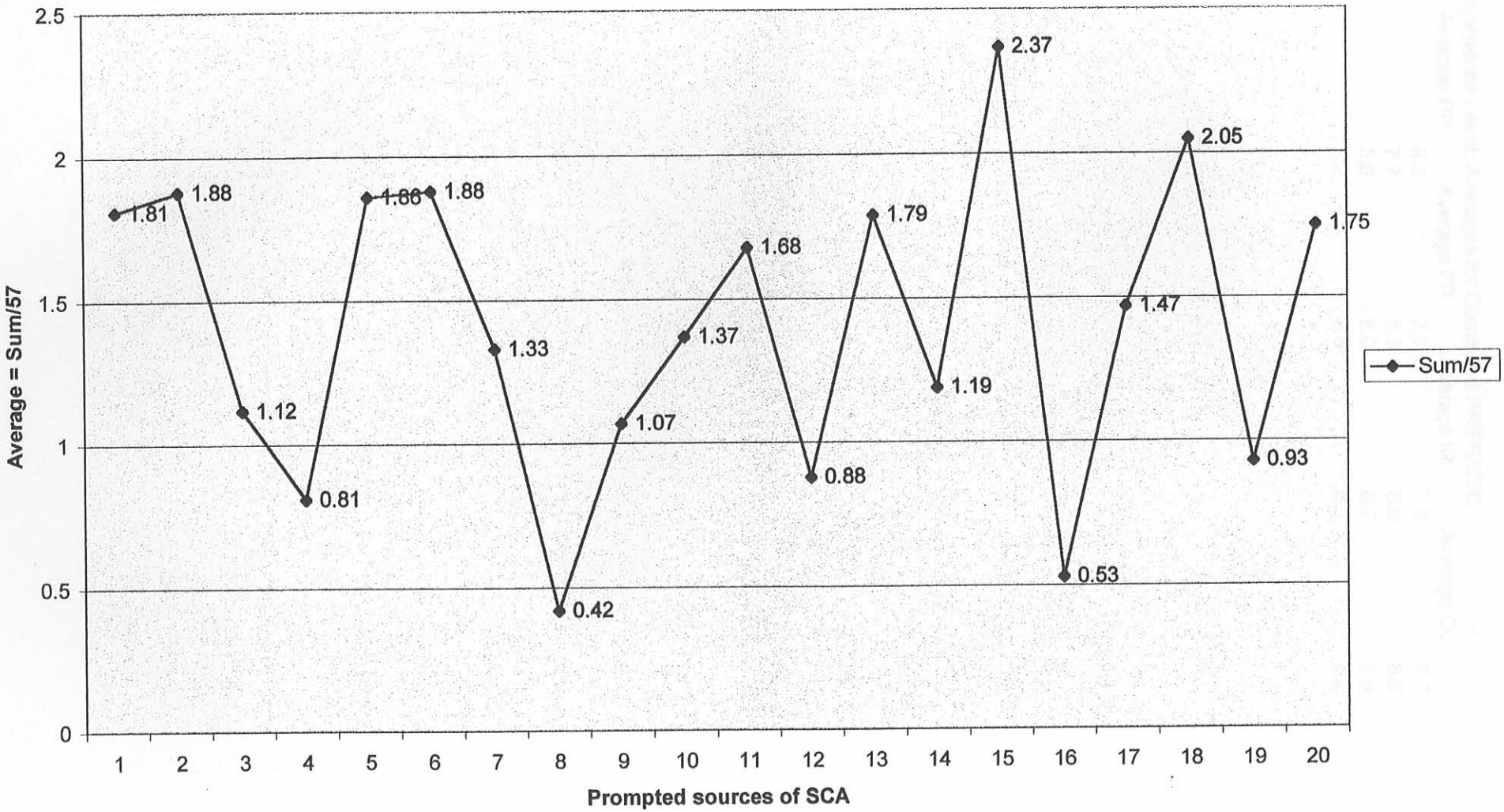


Chart C4: Averge Rating over all 57 respondents



Question C; by Experience Level; Averages for Combined PP/FR/IR/C

Respondent	Average PP	Average FR	Average IR	Average CC
X≤15, N=14	8.3	7.7	7.8	7.7
10<Y<15, N=21	7.7	8.3	8.0	8.5
Z<10, N=22	8.5	8.0	8.7	8.5
Total, N=57	8.2	8.0	8.2	8.2

Question C; by Mkt Experience; Averages for Combined PP/FR/IR/C

Respondent Numbe	Average PP	Average FR	Average IR	Average CC
More/Equal 3 Years	8.5	7.9	8.6	8.2
Less 3 Years	8.0	8.1	8.1	8.3
Overall Group	8.3	8.0	8.4	8.3

Question C; by Industry category; Averages for Combined PP/FR/IR/C

Respondent Number	Average PP	Average FR	Average IR	Average CC
Science, N=6	9.2	8.7	9.1	8
Energy, N=7	8.1	8.90	9.1	9.3
Industrial, N=5	7.2	8.8	8.1	8.6
PetroChemical, N=5	7.9	8.6	7.3	8.7
Technology, N=17	8.4	7.7	8.7	8.4
Services, N=14	8.5	7.9	8.2	8.3
Other, N=3	8.7	9.0	8.1	8.0
Total, N=57	8.3	8.5	8.4	8.5

APPENDIX D

Question D by # Years Business Experience

Respondent	# Years	Industry	Man Exp	Mkt Exp	D1 Pre	D2 Su	D3 Su	D4 Sup	Cometencies
resp 3	30	US Milit	25	0	5	4	5	5	
resp15	25	Agricult	25	20	5	5	3	4	
resp 48	24	Airlines	8	0	5	5	5	5	
resp 16	21	Technol	12	0	5	4	5	4	
resp 11	21	Medical	16	2.5	3	2	2	4	
resp 54	20	Energy	5	0	1	5	3	5	
resp 39	20	Softwar	15	2	5	3	5	5	
resp 17	20	Enginee	10	0	4	4	4	5	
resp 35	19	Oil & ga	0	0	3	5	2	5	
resp 9	18	Hydroca	10	0	4	2	4	4	
resp 52	18	Healthc	14	0	4	5	3	5	
resp 20	17	Energy	8	7	5	4	4	3	
resp 5	17	Oil & ga	10	0	4	5	4	5	
resp 56	16	High Te	10	7	5	5	4	4	
N=14	20.4	AVERA	12.0	2.8	4.1	4.1	3.8	4.5	
	20.0	MEDIAI	10.0	0.0	4.5	4.5	4.0	5.0	
resp 28	14	manufac	10	0	5	5	3	5	
resp 53	14	Law	5	0	4	5	4	5	
resp 36	14	Non-Prc	4	0	4	4	5	5	
resp 4	13	Petro Cl	6	5	5	4	5	5	
resp12	13	IT	8	5	5	4	5	5	
resp 10	13	Enginee	6	6	5	4	4	5	
resp 19	12	Nuclear	2	0	5	4	5	4	
resp 47	12	Semicor	0	0	4	2	4	5	
resp 14	12	Electror	3	0	5	5	4	4	
resp 18	12	Law	12	0	3	4	2	5	
resp 30	11	Energy	5	2	5	3	3	5	
resp 37	11	Energy	11	0	5	3	1	4	
resp 31	11	Industri	4	1	4	5	3	4	
resp 51	11	Oil & ga	6	3	3	5	2	4	
resp 32	11	Petro Cl	2	1	4	5	3	5	
resp 25	11	IT	8	10	5	5	4	4	
resp13	11	Financir	5	0	4	2	4	5	
resp 26	10	manufac	10	0	3	4	4	3	
resp 23	10	IT	6	1	4	4	2	5	
resp 7	10	IT	5	2	4	4	3	4	
resp 49	10	Healthc	5	0	4	2	2	5	
N=21	11.7	AVERA	5.9	1.7	4.3	4.0	3.4	4.6	
	11.0	MEDIAI	5.0	0.0	4.0	4.0	4.0	5.0	
Resp 1	9	High Te	9	5	5	3	3	5	
resp 27	8	Chemic	3	3	5	2	2	5	
resp 42	8	Chemic	4	0	5	5	4	4	
resp 44	8	Energy	5	2	5	5	5	5	
resp 50	8	Energy	0	3	4	4	5	5	
resp 38	8	Industri	0	2	4	4	5	4	
resp 21	8	Semicor	3	0	3	4	2	4	
resp 8	8	Softwar	2.5	6	5	5	3	4	
resp 40	8	PCs	4	0	5	3	3	5	
resp 22	8	Law	8	0	4	5	4	4	
Resp2	8	Public A	3	0	5	2	3	5	
resp 55	7	Chemic	2	5	2	3	5	5	
resp 41	7	Technol	0	1	4	5	2	5	
resp 46	7	Telecon	4	7	4	3	3	5	
resp 45	6.5	Softwar	3	2	5	3	4	5	
resp 43	6	Chemic	2	0	5	4	3	4	
resp 33	6	High Te	0	1.5	4	4	3	5	
resp 57	6	Professi	3	0	4	4	4	5	
resp 6	6	Medical	5	3	5	5	5	5	
resp 34	5	Energy	1	0	4	4	5	5	
resp 24	5	Industri	2	0	4	3	2	5	
resp 29	5	Financir	2	0	5	5	5	5	
N=22	7.1	AVERA	3.0	1.8	4.4	3.9	3.6	4.7	
	7.5	MEDIAI	3	1.25	4.5	4	3.5	5	

Question D by Industry Sector

Responde	# Years Ex	Industry	Man Exp	Mkt Expe	D1 Pref Pc	D2 Sup Fir	D3 Sup Inf	D4 Sup Cometencies
resp 27	8	Chemical	3	3	5	2	2	5
resp 42	8	Chemical	4	0	5	5	4	4
resp 43	6	Chemical	2	0	5	4	3	4
resp 55	7	Chemical	2	5	2	3	5	5
resp 19	12	Nuclear Sc	2	0	5	4	5	4
resp 9	18	Hydrocarb	10	0	4	2	4	4
N=6	9.8	AVERAGE	3.8	1.3	4.3	3.3	3.8	4.3
	8.0	MEDIAN	2.5	0.0	5.0	3.5	4.0	4.0
resp 20	17	Energy	8	7	5	4	4	3
resp 30	11	Energy	5	2	5	3	3	5
resp 34	5	Energy	1	0	4	4	5	5
resp 37	11	Energy	11	0	5	3	1	4
resp 44	8	Energy	5	2	5	5	5	5
resp 50	8	Energy	0	3	4	4	5	5
resp 54	20	Energy	5	0	1	5	3	5
N=7	11.4	AVERAGE	5.0	2.0	4.1	4.0	3.7	4.6
	11.0	MEDIAN	5.0	2.0	5.0	4.0	4.0	5.0
resp 24	5	Industrial	2	0	4	3	2	5
resp 31	11	Industrial	4	1	4	5	3	4
resp 38	8	Industrial &	0	2	4	4	5	4
resp 26	10	manufactu	10	0	3	4	4	3
resp 28	14	manufactu	10	0	5	5	3	5
N=5	9.6	MEAN	5.2	0.6	4	4.2	3.4	4.2
	10	MEDIAN	4	0	4	4	3	4
resp 35	19	Oil & gas	0	0	3	5	2	5
resp 5	17	Oil & gas	10	0	4	5	4	5
resp 51	11	Oil & gas	6	3	3	5	2	4
resp 32	11	Petro Cher	2	1	4	5	3	5
resp 4	13	Petro Cher	6	5	5	4	5	5
N=5	14.2	AVERAGE	4.8	1.8	3.8	4.8	3.2	4.8
	11	MEDIAN	5	2	5	4	4	5
Resp 1	9	High Tech	9	5	5	3	3	5
resp 33	6	High Tech	0	1.5	4	4	3	5
resp 56	16	High Tech	10	7	5	5	4	4
resp 23	10	IT	6	1	4	4	2	5
resp 25	11	IT	8	10	5	5	4	4
resp 7	10	IT	5	2	4	4	3	4
resp12	13	IT	8	5	5	4	5	5
resp 21	8	Semicondu	3	0	3	4	2	4
resp 47	12	Semicondu	0	0	4	2	4	5
resp 39	20	Software	15	2	5	3	5	5
resp 45	6.5	Software	3	2	5	3	4	5
resp 8	8	Software	2.5	6	5	5	3	4
resp 16	21	Technolog	12	0	5	4	5	4
resp 41	7	Technolog	0	1	4	5	2	5
resp 46	7	Telecommu	4	7	4	3	3	5
resp 14	12	Electronics	3	0	5	5	4	4
resp 40	8	PCs	4	0	5	3	3	5
N=17	10.9	AVERAGE	5.4	2.9	4.5	3.9	3.5	4.6
	10.0	MEDIAN	4.0	2.0	5.0	4.0	3.0	5.0
resp 10	13	Engineerin	6	6	5	4	4	5
resp 17	20	Engineerin	10	0	4	4	4	5
resp 29	5	Financing	2	0	5	5	5	5
resp13	11	Financing	5	0	4	2	4	5
resp 49	10	Healthcare	5	0	4	2	2	5
resp 52	18	Healthcare	14	0	4	5	3	5
resp 18	12	Law	12	0	3	4	2	5
resp 22	8	Law	8	0	4	5	4	4
resp 53	14	Law	5	0	4	5	4	5
resp 57	6	Profession	3	0	4	4	4	5
Resp2	8	Public Acc	3	0	5	2	3	5
resp 48	24	Airlines	8	0	5	5	5	5
resp 11	21	Medical De	16	2.5	3	2	2	4
resp 6	6	Medical De	5	3	5	5	5	5
N=14	12.6	AVERAGE	7.3	0.8	4.2	3.9	3.6	4.9
	11.5	MEDIAN	5.5	0.0	4.0	4.0	4.0	5.0
resp 36	14	Non-Profit	4	0	4	4	5	5
resp 3	30	US Military	25	0	5	4	5	5
resp15	25	Agriculture	25	20	5	5	3	4
N=3	23	AVERAGE	18.0	6.7	4.7	4.3	4.3	4.7
	24	MEDIAN	21.5	3.3	4.8	4.2	4.7	4.8

Question D by Industry Sector

Responder	# Years Ex	Industry	Man Exp	Mkt Expe	D1 Pref Po	D2 Sup Fir	D3 Sup Inf	D4 Sup Cometencies
resp 27	8	Chemical	3	3	5	2	2	5
resp 42	8	Chemical	4	0	5	5	4	4
resp 43	6	Chemical	2	0	5	4	3	4
resp 55	7	Chemical	2	5	2	3	5	5
resp 19	12	Nuclear Sc	2	0	5	4	5	4
resp 9	18	Hydrocarb	10	0	4	2	4	4
N=6	9.8	AVERAGE	3.8	1.3	4.3	3.3	3.8	4.3
	8.0	MEDIAN	2.5	0.0	5.0	3.5	4.0	4.0
resp 20	17	Energy	8	7	5	4	4	3
resp 30	11	Energy	5	2	5	3	3	5
resp 34	5	Energy	1	0	4	4	5	5
resp 37	11	Energy	11	0	5	3	1	4
resp 44	8	Energy	5	2	5	5	5	5
resp 50	8	Energy	0	3	4	4	5	5
resp 54	20	Energy	5	0	1	5	3	5
N=7	11.4	AVERAGE	5.0	2.0	4.1	4.0	3.7	4.6
	11.0	MEDIAN	5.0	2.0	5.0	4.0	4.0	5.0
resp 24	5	Industrial	2	0	4	3	2	5
resp 31	11	Industrial	4	1	4	5	3	4
resp 38	8	Industrial &	0	2	4	4	5	4
resp 26	10	manufactu	10	0	3	4	4	3
resp 28	14	manufactu	10	0	5	5	3	5
N=5	9.6	MEAN	5.2	0.6	4	4.2	3.4	4.2
	10	MEDIAN	4	0	4	4	3	4
resp 35	19	Oil & gas	0	0	3	5	2	5
resp 5	17	Oil & gas	10	0	4	5	4	5
resp 51	11	Oil & gas	6	3	3	5	2	4
resp 32	11	Petro Cher	2	1	4	5	3	5
resp 4	13	Petro Cher	6	5	5	4	5	5
N=5	14.2	AVERAGE	4.8	1.8	3.8	4.8	3.2	4.8
	11	MEDIAN	5	2	5	4	4	5
Resp 1	9	High Tech	9	5	5	3	3	5
resp 33	6	High Tech	0	1.5	4	4	3	5
resp 56	16	High Tech	10	7	5	5	4	4
resp 23	10	IT	6	1	4	4	2	5
resp 25	11	IT	8	10	5	5	4	4
resp 7	10	IT	5	2	4	4	3	4
resp12	13	IT	8	5	5	4	5	5
resp 21	8	Semicondu	3	0	3	4	2	4
resp 47	12	Semicondu	0	0	4	2	4	5
resp 39	20	Software	15	2	5	3	5	5
resp 45	6.5	Software	3	2	5	3	4	5
resp 8	8	Software	2.5	6	5	5	3	4
resp 16	21	Technolog	12	0	5	4	5	4
resp 41	7	Technolog	0	1	4	5	2	5
resp 46	7	Telecomm	4	7	4	3	3	5
resp 14	12	Electronics	3	0	5	5	4	4
resp 40	8	PCs	4	0	5	3	3	5
N=17	10.9	AVERAGE	5.4	2.9	4.5	3.9	3.5	4.6
	10.0	MEDIAN	4.0	2.0	5.0	4.0	3.0	5.0
resp 10	13	Engineerin	6	6	5	4	4	5
resp 17	20	Engineerin	10	0	4	4	4	5
resp 29	5	Financing	2	0	5	5	5	5
resp13	11	Financing	5	0	4	2	4	5
resp 49	10	Healthcare	5	0	4	2	2	5
resp 52	18	Healthcare	14	0	4	5	3	5
resp 18	12	Law	12	0	3	4	2	5
resp 22	8	Law	8	0	4	5	4	4
resp 53	14	Law	5	0	4	5	4	5
resp 57	6	Profession	3	0	4	4	4	5
Resp2	8	Public Acc	3	0	5	2	3	5
resp 48	24	Airlines	8	0	5	5	5	5
resp 11	21	Medical De	16	2.5	3	2	2	4
resp 6	6	Medical De	5	3	5	5	5	5
N=14	12.6	AVERAGE	7.3	0.8	4.2	3.9	3.6	4.9
	11.5	MEDIAN	5.5	0.0	4.0	4.0	4.0	5.0
resp 36	14	Non-Profit	4	0	4	4	5	5
resp 3	30	US Military	25	0	5	4	5	5
resp15	25	Agriculture	25	20	5	5	3	4
N=3	23	AVERAGE	18.0	6.7	4.7	4.3	4.3	4.7
	24	MEDIAN	21.5	3.3	4.8	4.2	4.7	4.8

Question D: By Marketing Experience

Responder	# Years Exp	Industry	Man Exp	Mkt Expe	D1 Pref Po	D2 Sup Fir	D3 Sup Inf	D4 Sup Cometencies
resp15	25	Agriculture	25	20	5	5	3	4
resp 25	11	IT	8	10	5	5	4	4
resp 20	17	Energy	8	7	5	4	4	3
resp 56	16	High Tech	10	7	5	5	4	4
resp 46	7	Telecommı	4	7	4	3	3	5
resp 10	13	Engineerin	6	6	5	4	4	5
resp 8	8	Software	2.5	6	5	5	3	4
resp 4	13	Petro Cher	6	5	5	4	5	5
resp12	13	IT	8	5	5	4	5	5
Resp 1	9	High Tech	9	5	5	3	3	5
resp 55	7	Chemical	2	5	2	3	5	5
resp 51	11	Oil & gas	6	3	3	5	2	4
resp 27	8	Chemical	3	3	5	2	2	5
resp 50	8	Energy	0	3	4	4	5	5
resp 6	6	Medical De	5	3	5	5	5	5
N=15	11.5	AVERAGE	6.8	6.3	4.5	4.1	3.8	4.5
	11.0	MEDIAN	6.0	5.0	5.0	4.0	4.0	5.0
resp 11	21	Medical De	16	2.5	3	2	2	4
resp 39	20	Software	15	2	5	3	5	5
resp 30	11	Energy	5	2	5	3	3	5
resp 7	10	IT	5	2	4	4	3	4
resp 44	8	Energy	5	2	5	5	5	5
resp 38	8	Industrial &	0	2	4	4	5	4
resp 45	6.5	Software	3	2	5	3	4	5
resp 33	6	High Tech	0	1.5	4	4	3	5
resp 31	11	Industrial	4	1	4	5	3	4
resp 32	11	Petro Cher	2	1	4	5	3	5
resp 23	10	IT	6	1	4	4	2	5
resp 41	7	Technologı	0	1	4	5	2	5
resp 3	30	US Military	25	0	5	4	5	5
resp 48	24	Airlines	8	0	5	5	5	5
resp 16	21	Technologı	12	0	5	4	5	4
resp 54	20	Energy	5	0	1	5	3	5
resp 17	20	Engineerin	10	0	4	4	4	5
resp 35	19	Oil & gas	0	0	3	5	2	5
resp 9	18	Hydrocarb	10	0	4	2	4	4
resp 52	18	Healthcare	14	0	4	5	3	5
resp 5	17	Oil & gas	10	0	4	5	4	5
resp 28	14	manufactu	10	0	5	5	3	5
resp 53	14	Law	5	0	4	5	4	5
resp 36	14	Non-Profit	4	0	4	4	5	5
resp 19	12	Nuclear Sc	2	0	5	4	5	4
resp 47	12	Semicondu	0	0	4	2	4	5
resp 14	12	Electronics	3	0	5	5	4	4
resp 18	12	Law	12	0	3	4	2	5
resp 37	11	Energy	11	0	5	3	1	4
resp13	11	Financing	5	0	4	2	4	5
resp 26	10	manufactu	10	0	3	4	4	3
resp 49	10	Healthcare	5	0	4	2	2	5
resp 42	8	Chemical	4	0	5	5	4	4
resp 21	8	Semicondu	3	0	3	4	2	4
resp 40	8	PCs	4	0	5	3	3	5
resp 22	8	Law	8	0	4	5	4	4
Resp2	8	Public Acc	3	0	5	2	3	5
resp 43	6	Chemical	2	0	5	4	3	4
resp 57	6	Profession	3	0	4	4	4	5
resp 34	5	Energy	1	0	4	4	5	5
resp 24	5	Industrial	2	0	4	3	2	5
resp 29	5	Financing	2	0	5	5	5	5
N=42	12.3	AVERAGE	6.0	0.5	4.2	3.9	3.5	4.6
	11	MEDIAN	5	0	4	4	4	5

Question D:	INDUSTRY:	PP/FR/IR/C	Total number of respondents with certain rating					
DE1	1	2	3	4	5 TOT	AVERAGE	STD DEV	
Chemical	0	1	0	1	4	6	1.2	1.643168
Energy	1	0	0	2	4	7	1.4	1.67332
Industrial&I	0	0	1	3	1	5	1	1.224745
Oil, Gas &	0	0	2	2	1	5	1	1
IT	0	0	1	6	10	17	3.4	4.449719
Services	0	0	2	7	5	14	2.8	3.114482
Other	0	0	0	1	2	3	0.6	0.894427
	1	1	6	22	27	57		
DE2	1	2	3	4	5 TOT	AVERAGE	STD DEV	
Chemical	0	2	1	2	1	6	1.2	0.83666
Energy	0	0	2	3	2	7	1.4	2.8
Industrial&I	0	0	1	2	2	5	1	2
Oil, Gas &	0	0	0	1	4	5	1	2
IT	0	1	5	6	5	17	3.4	6.8
Services	0	2	2	4	6	14	2.8	5.6
Other	0	0	0	2	1	3	0.6	1.2
	0	5	11	20	21	57		
DE3	1	2	3	4	5 tot	AVERAGE	STD DEV	
Chemical	0	1	1	2	2	6	1.2	0.83666
Energy	1	0	2	1	3	7	1.4	2.6
Industrial&I	0	1	2	1	1	5	1	2
Oil, Gas &	0	2	1	1	1	5	1	2
IT	0	3	6	5	3	17	3.4	6.8
Services	0	3	2	6	3	14	2.8	5.6
Other	0	0	1	0	2	3	0.6	1.2
	1	10	15	16	15	57		
DE4	1	2	3	4	5 tot	AVERAGE	STD DEV	
Chemical	0	0	0	4	2	6	1.2	1.788854
Energy	0	0	1	1	5	7	1.4	2.8
Industrial&I	0	0	1	2	2	5	1	2
Oil, Gas &	0	0	0	1	4	5	1	2
IT	0	0	0	7	10	17	3.4	6.8
Services	0	0	0	2	12	14	2.8	5.6
Other	0	0	0	1	2	3	0.6	1.2
	0	0	2	18	37	57		

Question D:	# YEARS XPERIENCE/PP		Total number of respondents with certain rating					
D1	1	2	3	4	5	total	AVERAGE	STD DEV
>=15 Year	1	0	2	4	7	14	2.8	2.774887
10-14 Yea	0	0	3	9	9	21	4.2	4.549725
<10 Years	0	1	1	9	11	22	4.4	5.176872
TOTAL	1	1	6	22	27	57	11.4	12.25969
D2	1	2	3	4	5	total	AVERAGE	STD DEV
>=15 Year	0	2	1	4	7	14	2.8	2.774887
10-14 Yea	0	3	2	9	7	21	4.2	3.701351
<10 Years	0	2	6	7	7	22	4.4	3.209361
TOTAL	0	7	9	20	21	57	11.4	8.961027
D3	1	2	3	4	5	total	AVERAGE	STD DEV
>=15 Year	0	2	3	5	4	14	2.8	1.923538
10-14 Yea	1	4	5	7	4	21	4.2	2.167948
<10 Years	0	4	7	4	7	22	4.4	2.880972
TOTAL	1	10	15	16	15	57	11.4	6.268971
D4	1	2	3	4	5	total	AVERAGE	STD DEV
>=15 Year	0	0	1	5	8	14	2.8	3.563706
10-14 Yea	0	0	1	7	13	21	4.2	5.718391
<10 Years	0	0	0	6	16	22	4.4	6.9857
TOTAL	0	0	2	18	37	57	11.4	16.18023

Question D: MKT XPERIENCEC Total number of respondents with certain rating

DE1/PP	1	2	3	4	5 tot		AVERAGE	STD DEV
>=3YEARS	0	1	1	2	11	15	3	4.527693
< 3 Years	1	0	5	20	16	42	8.4	9.071935
TOTAL	0	1	6	22	27	57	11.2	12.47798

DE2/FR	1	2	3	4	5 tot		AVERAGE	STD DEV
>=3YEARS	0	1	3	5	6	15	3	2.54951
< 3 Years	0	6	6	15	15	42	8.4	6.503845
TOTAL	0	7	9	20	21	57	11.4	8.961027

DE3/IR	1	2	3	4	5 tot		AVERAGE	STD DEV
>=3YEARS	0	2	4	4	5	15	3	2
< 3 Years	1	8	11	12	10	42	8.4	4.393177
TOTAL	1	10	15	16	15	57	11.4	6.268971

DE4/C	1	2	3	4	5 tot		AVERAGE	STD DEV
>=3YEARS	0	0	1	5	9	15	3	3.937004
< 3 Years	0	0	1	15	26	42	8.4	11.71751
TOTAL	0	0	2	20	35	57	11.4	15.64609

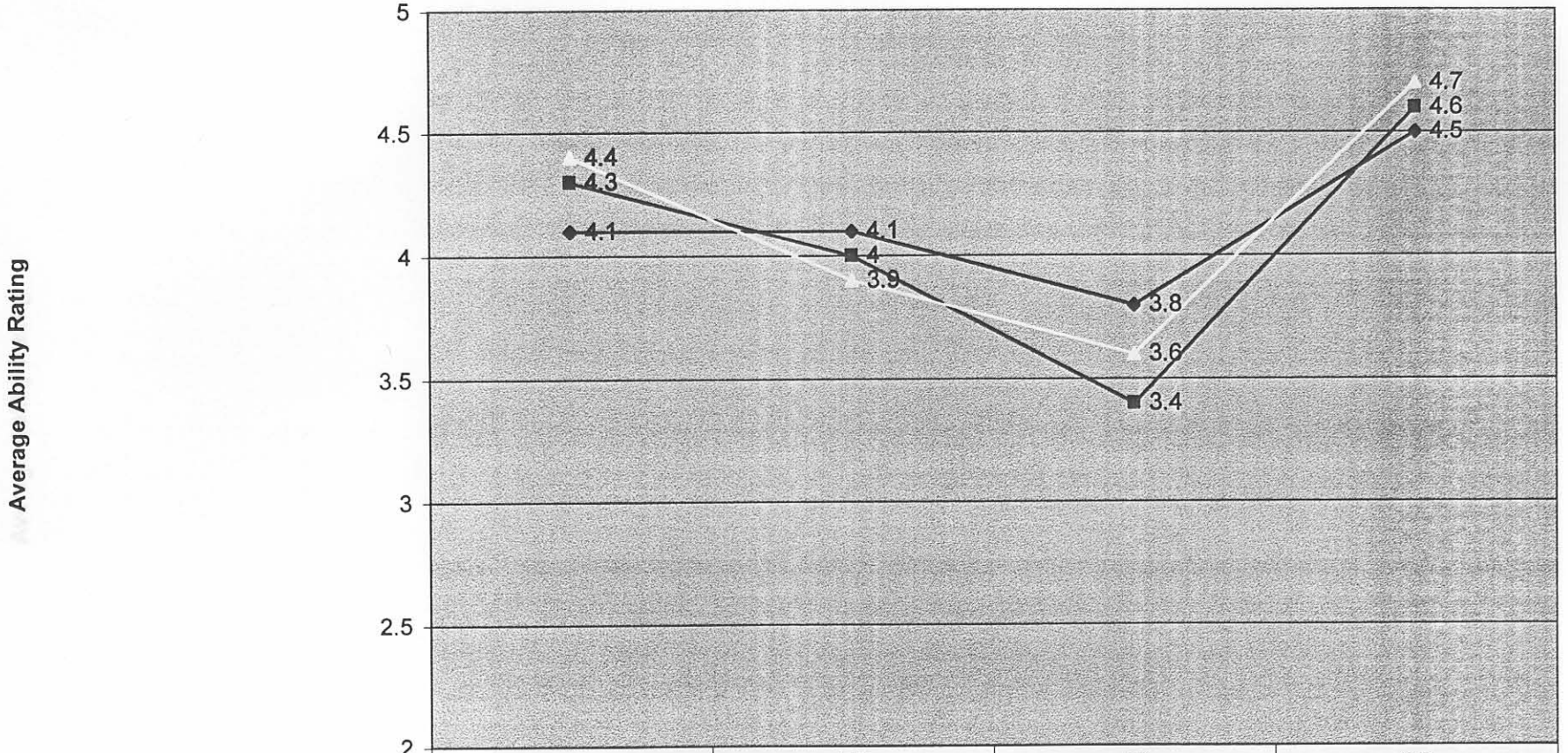
Question D: combined into 4 domains, sample average

Industry	Preferred Positioning	Superior Finite Reso	Superior Infinite Res	Superior Competencies
Science	4.3	3.3	3.8	4.3
Energy	4.1	4	3.7	4.6
Manufacturing	4	4.2	3.4	4.2
PetroChemical	3.8	4.8	3.2	4.8
Technology	4.5	3.9	3.5	4.6
Services	4.2	3.9	3.6	4.9
Other	4.7	4.3	4.3	4.7

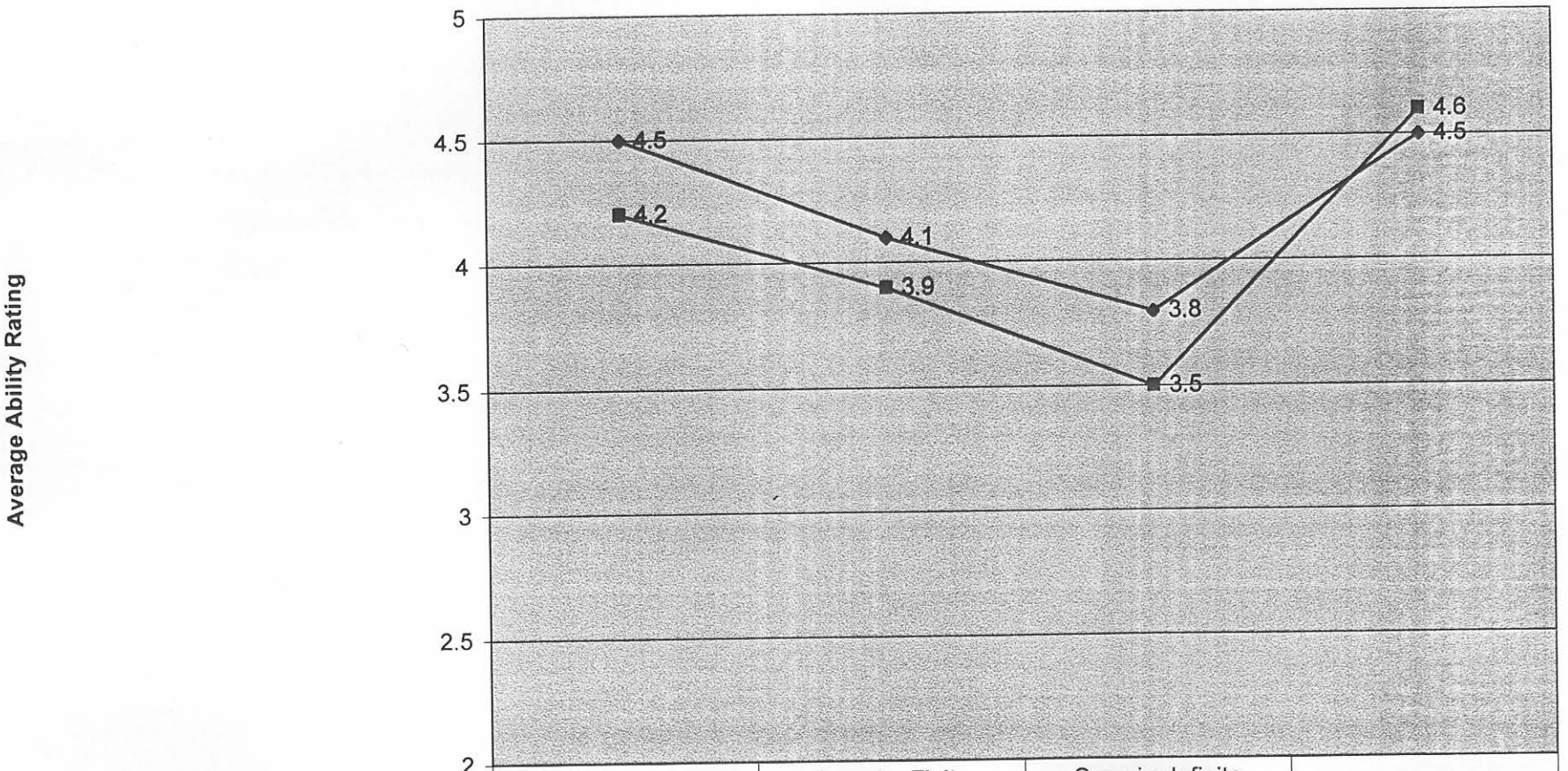
# Years Experience	Preferred Positioning	Superior Finite Reso	Superior Infinite Res	Superior Competencies
X>15	4.1	4.1	3.8	4.5
10<Y<15	4.3	4	3.4	4.6
Z<10	4.4	3.9	3.6	4.7

# Years Marketing Exp	Preferred Positioning	Superior Finite Reso	Superior Infinite Res	Superior Competencies
Mkt Exp more than/equal to	4.5	4.1	3.8	4.5
Mkt Experience below 3 Yea	4.2	3.9	3.5	4.6

Graph D1: Average Ability Rating by Respondents in Experience Level Groups



Graph D2: Average Ability Rating of Domains by Different Clusters of Marketing Experience Levels



	Preferred Positioning	Superior Finite Resources	Superior Infinite Resources	Superior Competencies
Mkt Exp more than/equal to 3 Years	4.5	4.1	3.8	4.5
Mkt Experience below 3 Years	4.2	3.9	3.5	4.6

APPENDIX E

Question E: Industry

	# Years	Industry	Man Ex	Mkt Ex	E1 PR	E2 sUI	E3 SU	E4 COMPETENCIES
	7	Chemic	2	5	4	6	10	10
	8	Chemic	3	3	10	2	6	7
	8	Chemic	4	0	9	7	8	8
	6	Chemic	2	0	9	7	8	7
	18	Hydroc	10	0	6	4	7	8
	12	Nuclear	2	0	8	6	7	10
Average	9.8		3.8	1.3	7.7	5.3	7.7	8.3
Median	8.0		2.5	0.0	8.5	6.0	7.5	8.0
	17	Energy	8	7	10	7	7	8
	8	Energy	0	3	5	10	5	4
	11	Energy	5	2	9	6	6	9
	8	Energy	5	2	10	10	10	10
	20	Energy	5	0	3	10	5	8
	11	Energy	11	0	0	10	0	7
	5	Energy	1	0	6	7	9	10
Average	11.4		5.0	2.0	6.1	8.6	6.0	8.0
Median	11.0		5.0	2.0	6.0	10.0	6.0	8.0
	14	manufa	10	0	9	7	6	5
	10	manufa	10	0	3	5	7	4
	11	Industri	4	1	8	6	9	10
	5	Industri	2	0	9	9	7	7
	8	Industri	0	2	8	9	8	8
Average	9.6		5.2	0.6	7.4	7.2	7.4	6.8
Median	10.0		4.0	0.0	8.0	7.0	7.0	7.0
	11	Oil & ga	6	3	7	9	4	8
	19	Oil & ga	0	0	9	10	6	9
	17	Oil & ga	10	0	8	8	8	9
	13	Petro C	6	5	10	7	9	10
	11	Petro C	2	1	6	9	4	8
Average	14.2		4.8	1.8	8.0	8.6	6.2	8.8
Median	13.0		6.0	1.0	8.0	9.0	6.0	9.0
	8	PCs	4	0	8	5	5	8
	12	Semico	0	0	5	3	6	10
	8	Semico	3	0	7	8	3	7
	8	Softwar	2.5	6	9	9	6	10
	20	Softwar	15	2	7	5	9	10
	6.5	Softwar	3	2	9	7	9	8
	7	Techno	0	1	7	9	3	10
	21	Techno	12	0	9	9	8	9
	7	Telecon	4	7	8	7	6	9
	11	IT	8	10	9	8	6	8
	13	IT	8	5	8	7	9	10
	10	IT	5	2	9	8	7	10
	10	IT	6	1	7	9	3	10
	12	Electror	3	0	10	7	8	9
	16	High Te	10	7	10	8	7	7
	9	High Te	9	5	10	5	5	10
	6	High Te	0	1.5	8	9	7	10
Average	10.9		5.4	2.9	8.2	7.2	6.3	9.1
Median	10.0		4.0	2.0	8.0	8.0	6.0	10.0
	24	Airlines	8	0	8	9	8	7
	6	Profess	3	0	6	5	7	10
	8	Public A	3	0	9	3	7	10
	11	Financii	5	0	5	9	8	9
	5	Financii	2	0	10	6	6	8
	18	Healthc	14	0	8	7	6	9
	10	Healthc	5	0	6	5	4	10
	14	Law	5	0	8	9	8	10
	12	Law	12	0	4	10	10	8
	8	Law	8	0	5	9	8	7
	6	Medical	5	3	8	9	7	10
	21	Medical	16	2.5	9	6	6	10
	13	Enginee	6	6	8	7	8	9
	20	Enginee	10	0	10	8	8	10
Average	12.6		7.3	0.8	7.4	7.3	7.2	9.1
Median	11.5		5.5	0.0	8.0	7.5	7.5	9.5
	14	Non-Pro	4	0	8	9	10	10
	30	US Milit	25	0	9	9	10	10
	25	Agricult	25	20	10	9	7	8
Average	23.0		18.0	6.7	9.0	9.0	9.0	9.3
Median	25.0		25.0	0.0	9.0	9.0	10.0	10.0

Question E: # Years Experience

	# Years Ex	E1 PREF F	E2 sUP FII	E3 SUP IN	E4 COMPETENCIES
	30	9	9	10	10
	25	10	9	7	8
	24	8	9	8	7
	21	9	9	8	9
	21	9	6	6	10
	20	3	10	5	8
	20	7	5	9	10
	20	10	8	8	10
	19	9	10	6	9
	18	6	4	7	8
	18	8	7	6	9
	17	10	7	7	8
	17	8	8	8	9
	16	10	8	7	7
Average	20.4	8.3	7.8	7.3	8.7
Median	20	9	8	7	9
	14	9	7	6	5
	14	8	9	8	10
	14	8	9	10	10
	13	10	7	9	10
	13	8	7	9	10
	13	8	7	8	9
	12	8	6	7	10
	12	5	3	6	10
	12	10	7	8	9
	12	4	10	10	8
	11	9	6	6	9
	11	0	10	0	7
	11	8	6	9	10
	11	7	9	4	8
	11	6	9	4	8
	11	9	8	6	8
	11	5	9	8	9
	10	3	5	7	4
	10	9	8	7	10
	10	7	9	3	10
	10	6	5	4	10
Average	11.7	7.0	7.4	6.6	8.8
Median	11	8	7	7	9
	9	10	5	5	10
	8	10	2	6	7
	8	9	7	8	8
	8	5	10	5	4
	8	10	10	10	10
	8	8	9	8	8
	8	8	5	5	8
	8	7	8	3	7
	8	9	9	6	10
	8	9	3	7	10
	8	5	9	8	7
	7	4	6	10	10
	7	7	9	3	10
	7	8	7	6	9
	6.5	9	7	9	8
	6	9	7	8	7
	6	8	9	7	10
	6	6	5	7	10
	6	8	9	7	10
	5	6	7	9	10
	5	9	9	7	7
	5	10	6	6	8
Average	7.1	7.9	7.2	6.8	8.5
Median	7.5	8	7	7	8.5

	Question E: Mkt Experience					
	# Years Ex	Mkt Expe	E1 PREF F	E2 sUP FII	E3 SUP IN	E4 COMPETENCIES
	25	20	10	9	7	8
	11	10	9	8	6	8
	17	7	10	7	7	8
	7	7	8	7	6	9
	16	7	10	8	7	7
	8	6	9	9	6	10
	13	6	8	7	8	9
	7	5	4	6	10	10
	13	5	10	7	9	10
	13	5	8	7	9	10
	9	5	10	5	5	10
	8	3	10	2	6	7
	8	3	5	10	5	4
	11	3	7	9	4	8
	6	3	8	9	7	10
Average	11.5	6.3	8.4	7.3	6.8	8.5
Median	11.0	5.0	9.0	7.0	7.0	9.0
	21	2.5	9	6	6	10
	11	2	9	6	6	9
	8	2	10	10	10	10
	8	2	8	9	8	8
	20	2	7	5	9	10
	6.5	2	9	7	9	8
	10	2	9	8	7	10
	6	1.5	8	9	7	10
	11	1	8	6	9	10
	11	1	6	9	4	8
	7	1	7	9	3	10
	10	1	7	9	3	10
	8	0	9	7	8	8
	6	0	9	7	8	7
	18	0	6	4	7	8
	12	0	8	6	7	10
	20	0	3	10	5	8
	11	0	0	10	0	7
	5	0	6	7	9	10
	14	0	9	7	6	5
	10	0	3	5	7	4
	5	0	9	9	7	7
	19	0	9	10	6	9
	17	0	8	8	8	9
	8	0	8	5	5	8
	12	0	5	3	6	10
	8	0	7	8	3	7
	21	0	9	9	8	9
	12	0	10	7	8	9
	24	0	8	9	8	7
	6	0	6	5	7	10
	8	0	9	3	7	10
	11	0	5	9	8	9
	5	0	10	6	6	8
	18	0	8	7	6	9
	10	0	6	5	4	10
	14	0	8	9	8	10
	12	0	4	10	10	8
	8	0	5	9	8	7
	20	0	10	8	8	10
	14	0	8	9	10	10
	30	0	9	9	10	10
Average	12.3	0.5	7.4	7.5	6.9	8.7
Median	11.0	0.0	8.0	8.0	7.0	9.0

Question E: INDUSTRY: PP/FR/IR/C Total number of respondents with certain rating

E1	0 not impor	1	2	3	4	5	6	7	8	9	10 very IS	tot	average	std dev
Chemical	0	0	0	0	1	0	1	0	1	2	1	6		0.687552
Energy	1	0	0	1	0	1	1	0	0	1	2	7		0.6742
Industrial&I	0	0	0	1	0	0	0	0	2	2	0	5		0.8202
Oil, Gas &	0	0	0	0	0	0	1	1	1	1	1	5		0.522233
IT	0	0	0	0	0	1	0	4	4	5	3	17		2.0181
Services	0	0	0	0	1	2	2	0	5	2	2	14		1.55505
Other	0	0	0	0	0	0	0	0	1	1	1	3		0.467099
	1	0	0	2	2	4	5	5	0	14	10	57		

E1	0<X<5	5	5<X<8	TOT
Chemical	1	0	5	6
Energy	2	1	4	7
Industrial&I	1	0	4	5
Oil, Gas &	0	0	5	5
IT	0	1	16	17
Services	1	2	11	14
Other	0	0	3	3
	5	4	48	57

E2	0	1	2	3	4	5	6	7	8	9	10 tot	average	std dev
Chemical	0	0	1	0	1	0	2	2	0	0	0	6	0.8202
Energy	0	0	0	0	0	0	1	2	0	0	4	7	1.286291
Industrial&I	0	0	0	0	0	1	1	1	0	2	0	5	0.687552
Oil, Gas &	0	0	0	0	0	0	0	1	1	2	1	5	0.687552
IT	0	0	0	1	0	3	0	4	4	5	0	17	2.0181
Services	0	0	0	1	0	1	3	2	1	5	1	14	1.55505
Other	0	0	0	0	0	0	0	0	0	3	0	3	0.904534
	0	0	1	2	1	5	7	12	6	17	6	57	

E2	0<X<5	5	5<X<8	TOT
Chemical	2	0	4	6
Energy	0	0	7	7
Industrial&I	0	1	4	5
Oil, Gas &	0	0	5	5
IT	1	3	13	17
Services	1	1	12	14
Other	0	0	3	3
	4	5	48	57

E3	0	1	2	3	4	5	6	7	8	9	10 tot	average	std dev
Chemical	0	0	0	0	0	0	1	2	2	0	1	6	0.8202
Energy	1	0	0	0	0	2	1	1	0	1	1	7	0.6742
Industrial&I	0	0	0	0	0	0	1	2	1	1	0	5	0.687552
Oil, Gas &	0	0	0	0	2	0	1	0	1	1	0	5	0.687552

IT	0	0	0	3	0	2	4	4	1	3	0	17	1.694912
Services	0	0	0	0	1	0	3	3	6	0	1	14	1.954017
Other	0	0	0	0	0	0	0	1	0	0	2	3	0.64667
	1	0	0	3	3	4	11	13	11	6	5	57	

E3	0<X<5				5			5<X<8			TOT	
Chemical	0				0			6				6
Energy	1				2			4				7
Industrial&I	0				0			5				5
Oil, Gas &	2				0			3				5
IT	3				2			12				17
Services	1				0			13				14
Other	0				0			3				3
	7				4			46				57

E4	0	1	2	3	4	5	6	7	8	9	10	tot	average	std dev
Chemical	0	0	0	0	0	0	0	2	2	0	2	6		0.934199
Energy	0	0	0	0	1	0	0	1	2	1	2	7		0.80904
Industrial&I	0	0	0	0	1	1	0	1	1	0	1	5		0.522233
Oil, Gas &	0	0	0	0	0	0	0	0	2	2	1	5		0.8202
IT	0	0	0	0	0	0	0	2	3	3	9	17		2.769969
Services	0	0	0	0	0	0	0	2	2	3	7	14		2.195036
Other	0	0	0	0	0	0	0	0	1	0	2	3		0.64667
	0	0	0	0	2	1	0	8	13	9	24	57		

E4	0<X<5				5			5<X<8			TOT	
Chemical	0				0			6				6
Energy	1				0			6				7
Industrial&I	1				1			3				5
Oil, Gas &	0				0			5				5
IT	0				0			17				17
Services	0				0			14				14
Other	0				0			3				3
	2				1			54				57

Question E: # YEARS XPERIENCE/PP Total number of respondents with certain rating

E1/PP	0 not impor	1	2	3	4	5	6	7	8 very NB	9	10 tot		average	std dev
15+ Years	0	0	0	1	0	0	1	1	6	4	1	14	1.272727	1.61808
10<x<15	1	0	0	1	1	2	2	2	6	4	2	21	1.909091	1.758098
<=10 Years	0	0	0	0	1	2	2	2	5	6	4	22	2	2.144761
TOTAL	1	0	0	2	2	4	5	5	14	14	10	57		

E1/PP COI	0<X<5	5	5<X<8	
15+ Years	1	0	13	14
10<x<15	3	2	16	21
<=10 Years	1	2	19	22
Total	5	4	48	57

E2/FR	0 not impor	1	2	3	4	5	6	7	8 very NB	9	10 tot		average	std dev
15+ Years	0	0	0	0	1	1	1	2	3	4	2	14	1.272727	1.3484
10<x<15	0	0	0	1	0	2	3	5	2	6	2	21	1.909091	2.071451
<=10 Years	0	0	1	1	0	2	3	5	1	7	2	22	2	2.236068
TOTAL	0	0	1	2	1	5	7	12	6	17	6	57		

E2/FR COI	0<X<5	5	5<X<8	
15+ Years	1	1	12	14
10<x<15	1	2	18	21
<=10 Years	2	2	18	22
Total	4	5	48	57

E3/IR	0 not impor	1	2	3	4	5	6	7	8 very NB	9	10 tot		average	std dev
15+ Years	0	0	0	0	0	1	3	4	4	1	1	14	1.272727	1.61808
10<x<15	1	0	0	1	1	2	4	3	4	3	2	21	1.909091	1.445998
<=10 Years	0	0	0	2	0	3	4	5	4	2	2	22	2	1.843909
TOTAL	1	0	0	3	1	6	11	12	12	6	5	57		

E3/IR COM	0<X<5	5	5<X<8	
15+ Years	0	1	13	14
10<x<15	3	2	16	21
<=10 Years	2	3	17	22
Total	5	6	46	57

E4/C	0 not impor	1	2	3	4	5	6	7	8 very NB	9	10 tot		average	std dev
15+ Years	0	0	0	0	0	0	0	2	4	4	4	14	1.272727	1.848833
10<x<15	0	0	0	0	0	1	1	1	4	4	10	21	1.909091	3.080732
<=10 Years	0	0	0	0	0	1	0	5	5	1	10	22	2	3.286335
TOTAL	0	0	0	0	0	2	1	8	13	9	24	57		

E4/C COM	0<X<5	5	5<X<8	
15+ Years	0	0	14	14
10<x<15	0	1	20	21

<=10 Years	0	1	21	22
Total	0	2	55	57

Question E: Mkt Experience

	E1 Preferr	E2 Superic	E3 Superic	E4 Superior Competencies & Capabilities
More than/	8.4	7.3	6.8	8.5
Less than :	7.4	7.5	6.9	8.7
Overall Av	7.9	7.4	6.85	8.6

Question E: # Years Overall Business Experience

	E1 Preferr	E2 Superic	E3 Seperic	E4 Superior Competencies & Capabilities
X>15	8.3	7.8	7.3	8.7
10<Y<15	7	7.4	6.6	8.8
Z<10	7.9	7.2	6.8	8.5
Overall Av	7.7	7.5	6.9	8.7

Question E: Industry Sector

	E1 Preferr	E2 Superic	E3 Seperic	E4 Superior Competencies & Capabilities
Science &	7.7	5.3	7.7	8.3
Energy	6.1	8.6	6	8
Industrial a	7.4	7.2	7.4	6.8
Oil, Gas &	8	8.6	6.2	8.8
Technolog	8.2	7.2	6.3	9.1
Services	7.4	7.3	7.2	9.1
Overall Av	7.5	7.4	6.8	8.4

Question E: MKT XPERIENCE	Total number of respondents with certain rating										
E1/PP	0 not impor	1	2	3	4	5	6	7	8 very NB	9	10 tot	
>=3YEARS	0	0	0	0	1	1	0	1	4	2	6	15
< 3 Years	1	0	0	2	1	3	5	4	10	12	4	42
TOTAL	1	0	0	2	2	4	5	5	14	14	10	57

E1/SMALL	0<X<5	5 5<X<8	TOT
>3,	1	1	13	15
<3	4	3	35	42
Total	5	4	48	57

AE2/FR	0 not impor	1	2	3	4	5	6	7	8 very NB	9	10 tot	
>=3YEARS	0	0	1	0	0	1	1	5	2	4	1	15
< 3 Years	0	0	0	2	1	5	5	7	4	13	5	42
TOTAL	0	0	1	2	1	6	6	12	6	17	6	57

E2/FR COI	0<X<5	5 5<X<8	TOT
>3,	1	1	13	15
<3	3	5	34	42
Total	4	6	47	57

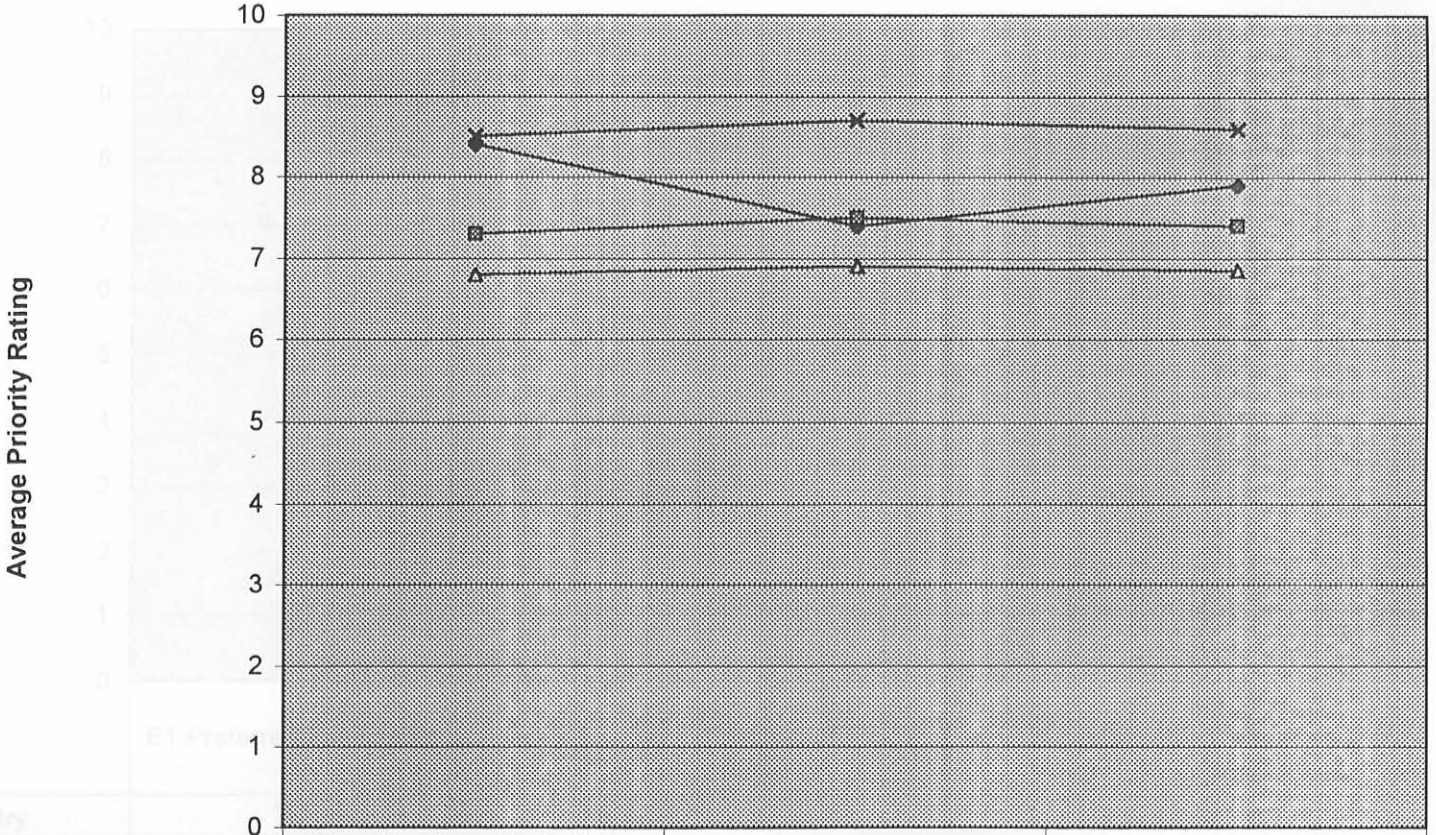
E3/IR	0 not impor	1	2	3	4	5	6	7	8 very NB	9	10 tot	
>=3YEARS	0	0	0	0	1	2	4	4	1	2	1	15
< 3 Years	1	0	0	3	3	1	7	8	11	4	4	42
TOTAL	1	0	0	3	4	3	11	12	12	6	5	57

E3/IR COM	0<X<5	5 5<X<8	TOT
>3,	1	2	12	15
<3	7	1	34	42
Total	8	3	46	57

AE4/C	0 not impor	1	2	3	4	5	6	7	8 very NB	9	10 tot	
>=3YEARS	0	0	0	0	1	0	0	2	4	2	6	6
< 3 Years	0	0	0	0	1	1	0	6	9	7	18	42
TOTAL	0	0	0	0	2	1	0	8	13	9	24	57

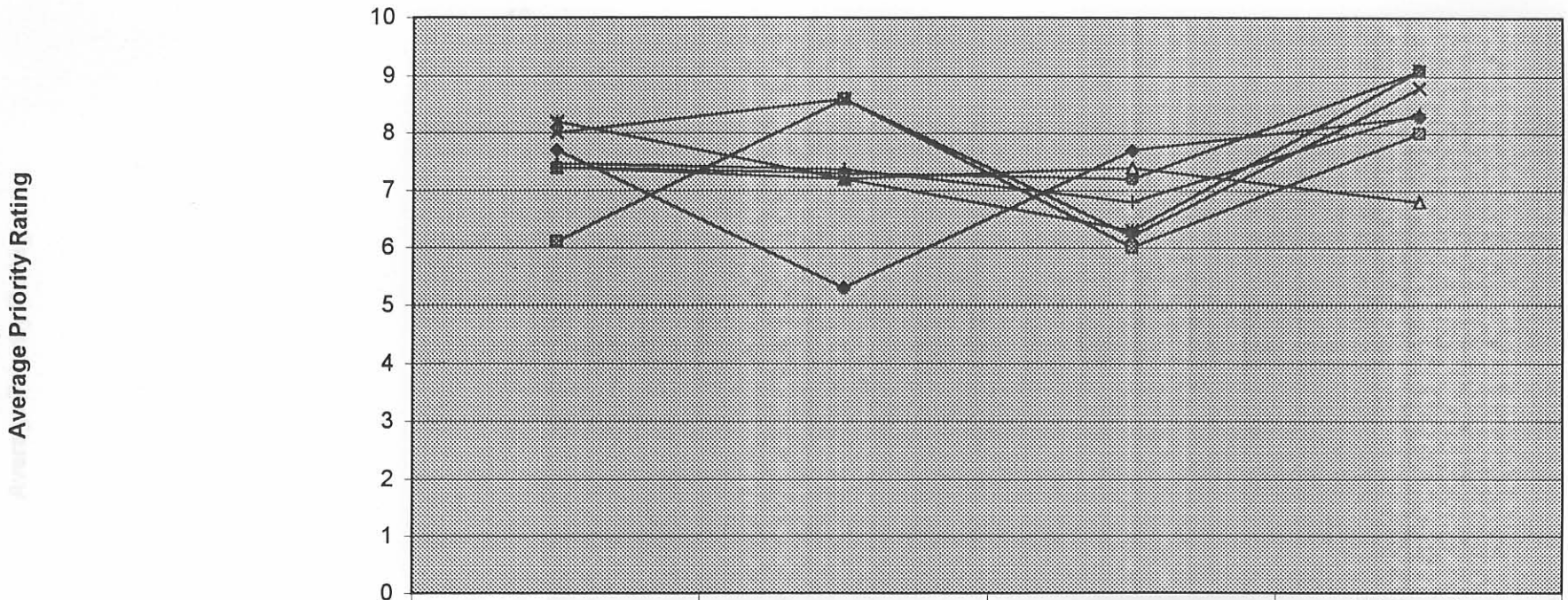
E4/C COM	0<X<5	5 5<X<8	TOT
>3,	1	0	14	15
<3	1	1	40	42
Total	2	1	54	57

Graph 4.8A: Average Priority Rating of 4 Domains by Clusters of Marketing Experience Levels



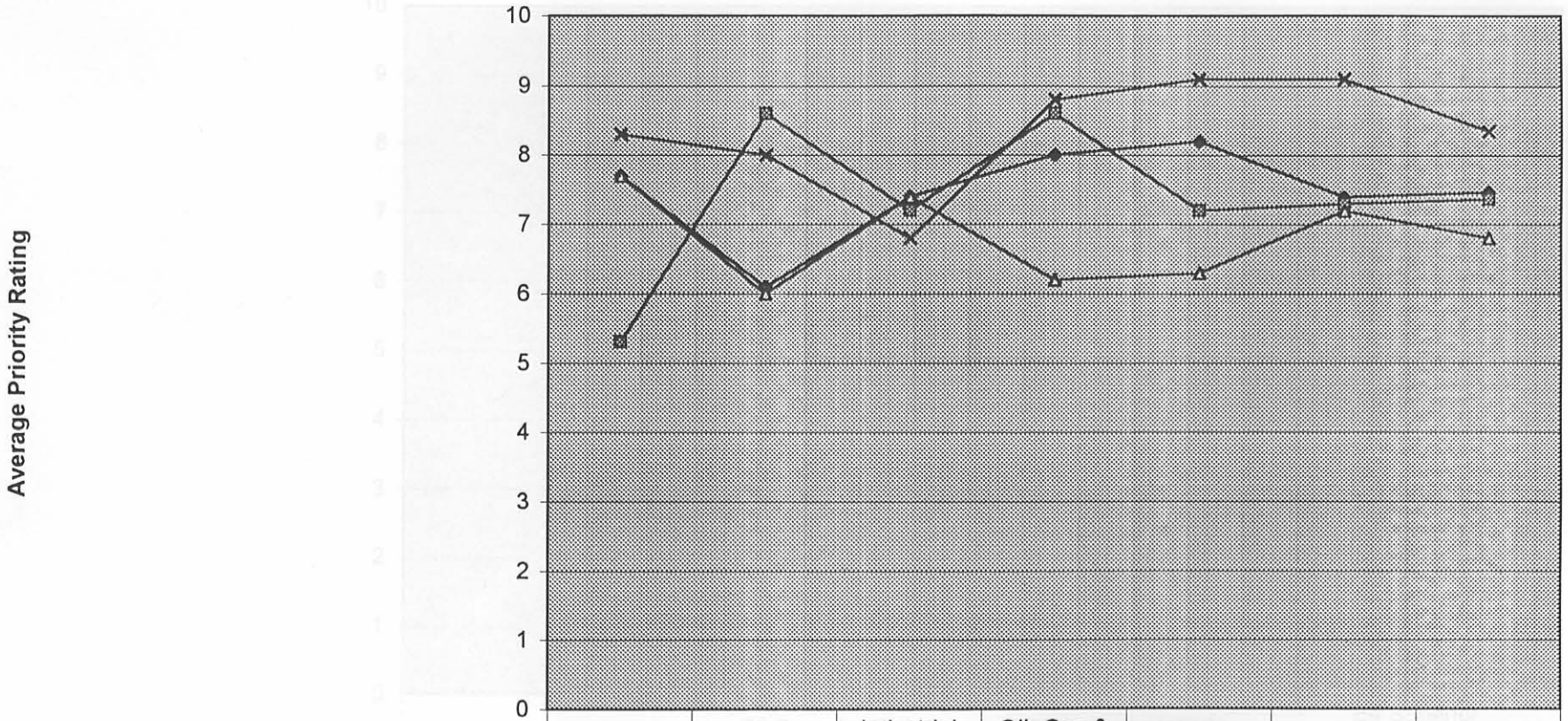
	More than/equal to 3 Years Exp	Less than 3 Years Exp	Overall Average
E1 Preferred Positioning	8.4	7.4	7.9
E2 Superior Finite Resources	7.3	7.5	7.4
E3 Superior Infinite Resources	6.8	6.9	6.85
E4 Superior Competencies & Capabilities	8.5	8.7	8.6

Graph 4.8B: Priority Rating of Domains by Clusters of Industry Sectors



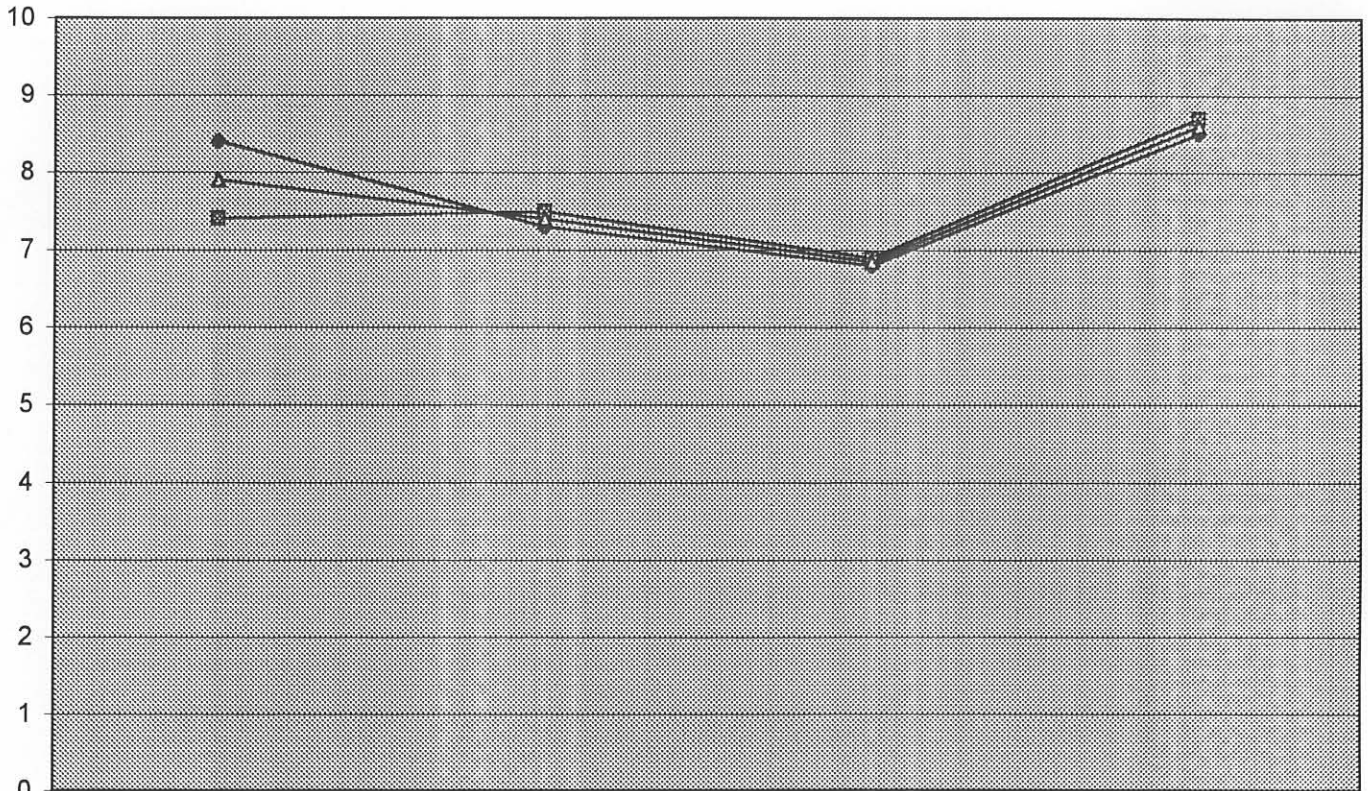
	E1 Preferred Positioning	E2 Superior Finite Resources	E3 Seperior Infinite Resources	E4 Superior Competencies & Capabilities
Science & Chemistry	7.7	5.3	7.7	8.3
Energy	6.1	8.6	6	8
Industrial and Manufacturing	7.4	7.2	7.4	6.8
Oil, Gas & Petrochemical	8	8.6	6.2	8.8
Technology & IT	8.2	7.2	6.3	9.1
Services	7.4	7.3	7.2	9.1
Overall Average	7.5	7.4	6.8	8.4

Graph 4.9A: Priority Rating of Domains by Clusters of Industry Sectors



	Science & Chemistry	Energy	Industrial and Manufacturi	Oil, Gas & Petrochemical	Technology & IT	Services	Overall Average
E1 Preferred Positioning	7.7	6.1	7.4	8	8.2	7.4	7.5
E2 Superior Finite Resources	5.3	8.6	7.2	8.6	7.2	7.3	7.4
E3 Seperior Infinite Resources	7.7	6	7.4	6.2	6.3	7.2	6.8
E4 Superior Competencies & Capabilities	8.3	8	6.8	8.8	9.1	9.1	8.4

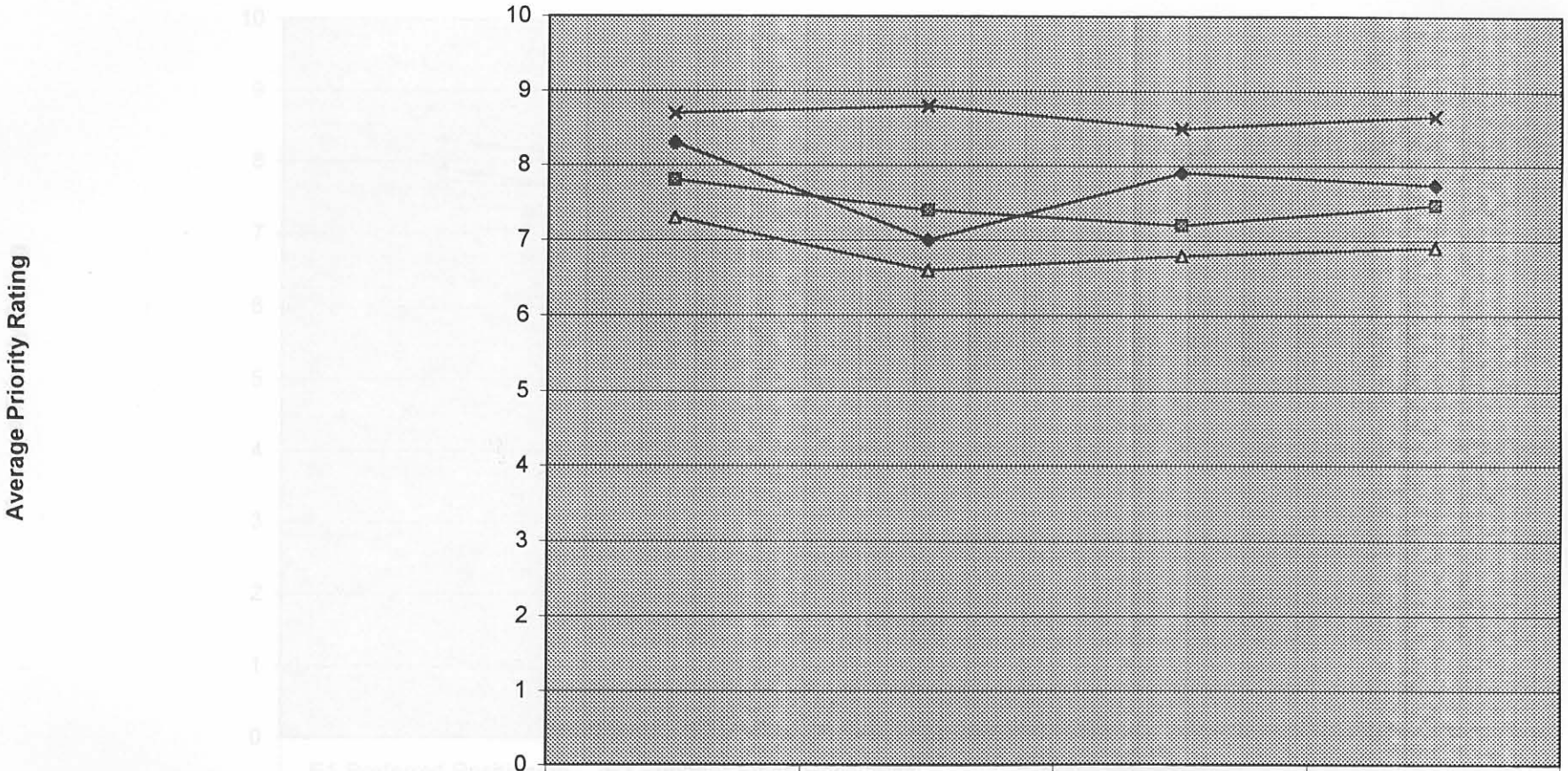
Graph 4.10A: Average Priority Rating by Mkt Experience Clusters



	E1 Preferred Positioning	E2 Superior Finite Resources	E3 Superior Infinite Resources	E4 Superior Competencies & Capabilities
More than/equal to 3 Years Exp	8.4	7.3	6.8	8.5
Less than 3 Years Exp	7.4	7.5	6.9	8.7
Overall Average	7.9	7.4	6.85	8.6

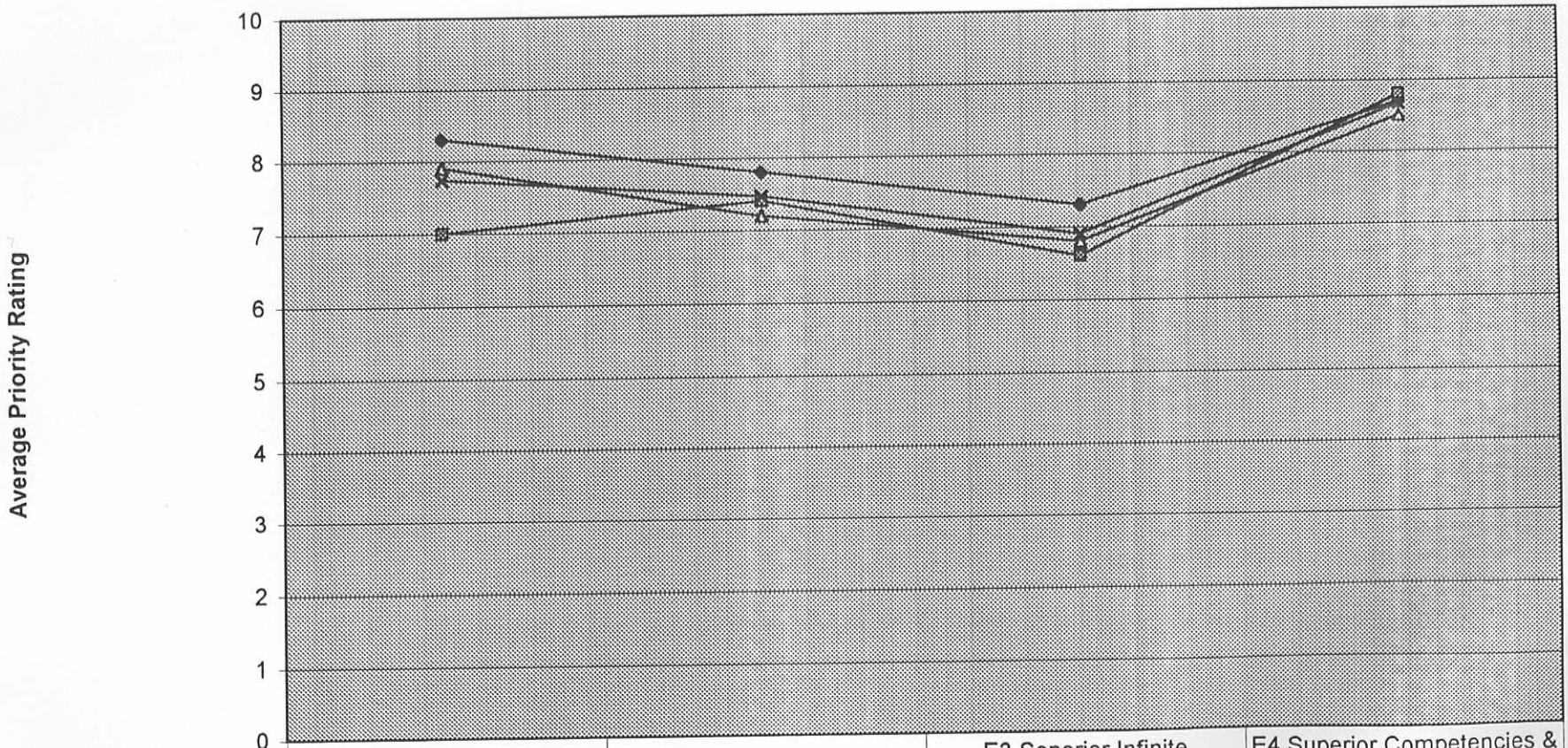
Average Priority Rating

Chart 4.10B: Priority Rating of Domains by Clusters of Experience Levels



	X>15	10<Y<15	Z<10	Overall Average
E1 Preferred Positioning	8.3	7	7.9	7.7
E2 Superior Finite Resources	7.8	7.4	7.2	7.5
E3 Seperior Infinite Resources	7.3	6.6	6.8	6.9
E4 Superior Competencies & Capabilities	8.7	8.8	8.5	8.7

Graph 4.10C: Priority Rating of Domians by Clusters of Overall Business Experience



	E1 Preferred Positioning	E2 Superior Finite Resources	E3 Seperior Infinite Resources	E4 Superior Competencies & Capabilities
X>15	8.3	7.8	7.3	8.7
10<Y<15	7	7.4	6.6	8.8
Z<10	7.9	7.2	6.8	8.5
Overall Average	7.7	7.5	6.9	8.7

APPENDIX F

Comparison of combo # yEARS EXPERIENCE for Question E1 and A1 - E4 and A4

E1/PP COMBO	0<X<5	5	5<X<8	
15+ Years	1	0	13	14
10<x<15	3	2	16	21
<=10 Years	1	2	19	22
Total	5	4	48	57

AE1/PP COM	0<X<4	4	4<X<8	
15+ Years	2	1	11	14
10<x<15	3	1	17	21
<=10 Years	2	2	18	22
Total	7	4	46	57

E2/FR COMBO	0<X<5	5	5<X<8	
15+ Years	1	1	12	14
10<x<15	1	2	18	21
<=10 Years	2	2	18	22
Total	4	5	48	57

AE2/FR COI	0<X<4	4	4<X<8	
15+ Years	1	1	12	14
10<x<15	1	1	19	21
<=10 Years	1	2	19	22
Total	3	4	50	57

E3/IR COMP	Unimportai	Neutral	Important	
More than 15 Years Experience A	10	2	2	14
More than 15 Years Experience E	0	1	13	14
Between 10 & 15 Years A	9	0	12	21
Between 10 & 15 Years E	3	2	16	21
Business Experience <10 Years A	11	3	8	22
Business Experience <10 Years E	2	3	17	22

E3/IR COMP	Unimportai	Neutral	Important	
Total E	5	6	46	57
Total A	30	5	22	57

AE3/IR COM	0<X<4	4	4<X<8	
10<x<15	9	0	12	21
<=10 Years	11	3	8	22
Total	20	3	20	43

E4/C COMBO	0<X<5	5	5<X<8	
15+ Years	0	0	14	14
10<x<15	0	1	20	21
<=10 Years	0	1	21	22
Total	0	2	55	57

AE4/C COM	0<X<4	4	4<X<8	
15+ Years	4	2	8	14
10<x<15	11	1	9	21
<=10 Years	10	2	10	22
Total	25	5	27	57

Comparison of combo MKT EXPERIENCE for Question E1 and A1 - E4 and A4

E1/SMALL	0<X<5	5	5<X<10	TOT
>3,	1	1	13	15
<3	4	3	35	42
Total	5	4	48	57

AE1/SMAL	0<X<4	4	4<X<8	
>3,	2	2	11	15
<3	5	2	35	42
Total	7	4	46	57

E2/FR COI	0<X<5	5	5<X<10	TOT
>3,	1	1	13	15
<3	3	5	34	42
Total	4	6	47	57

AE2/FR C(	0<X<4	4	4<X<8	
>3,	1	0	14	15
<3	2	3	37	42
Total	3	3	51	57

E3/IR COM	Unimportar	Neutral	Important	TOT
>=3 for A	6	2	7	15
>=3 for E	1	2	12	15
<3 for A	24	3	15	42
<3for E	7	1	34	42
IR	Unimportar	Neutral	Important	
Total	8	3	46	57
Total	30	5	22	57

AE3/IR CC	0<X<4	4	4<X<8	
>3,	6	2	7	15
<3	24	3	15	42
Total	30	5	22	57

E4/C COM	0<X<5	5	5<X<10	TOT
>3,	1	0	14	15
<3	1	1	40	42
Total	2	1	54	57

AE4/C COI	0<X<4	4	4<X<8	
>3,	5	0	10	15
<3	22	3	17	42
Total	27	3	27	57

Comparison of combo INDUSTRY for Question E1 and A1 - E4 and A4

E1	0<X<5	5	5<X<10	TOT
Chemical	1	0	5	6
Energy	2	1	4	7
Industrial&	1	0	4	5
Oil, Gas &	0	0	5	5
IT	0	1	16	17
Services	1	2	11	14
Other	0	0	3	3
Total Num	5	4	48	57

AE1	0<X<4	4	4<X<8	tot
Chemical	0	0	6	6
Energy	3	2	2	7
Industrial&	0	0	5	5
Oil, Gas &	1	0	4	5
IT	2	2	13	17
Services	1	0	13	14
Other	0	0	3	3
	7	4	46	57

E2	0<X<5	5	5<X<10	TOT
Chemical	2	0	4	6
Energy	0	0	7	7
Industrial&	0	1	4	5
Oil, Gas &	0	0	5	5
IT	1	3	13	17
Services	1	1	12	14
Other	0	0	3	3
	4	5	48	57

AE2	0<X<4	4	4<X<8	tot
Chemical	0	0	6	6
Energy	1	0	6	7
Industrial&	0	0	5	5
Oil, Gas &	1	0	4	5
IT	0	2	15	17
Services	0	1	13	14
Other	0	1	2	3
	2	4	51	57

E3	0<X<5	5	5<X<10	TOT
Chemical	0	0	6	6
Energy	1	2	4	7
Industrial&	0	0	5	5
Oil, Gas &	2	0	3	5
IT	3	2	12	17
Services	1	0	13	14
Other	0	0	3	3
	7	4	46	57

AE3	0<X<4	4	4<X<8	tot
Chemical	2	1	3	6
Energy	4	0	3	7
Industrial&	3	0	2	5
Oil, Gas &	4	0	1	5
IT	8	2	7	17
Services	8	1	5	14
Other	1	1	1	3
	30	5	22	57

E4	0<X<5	5	5<X<10	TOT
Chemical	0	0	6	6
Energy	1	0	6	7
Industrial&	1	1	3	5
Oil, Gas &	0	0	5	5
IT	0	0	17	17
Services	0	0	14	14
Other	0	0	3	3
	2	1	54	57

Ae4	0<X<4	4	4<X<8	tot
Chemical	0	3	3	6
Energy	2	0	5	7
Industrial&	5	0	0	5
Oil, Gas &	3	1	1	5
IT	6	1	10	17
Services	8	0	6	14
Other	1	0	2	3
	25	5	27	57

Comparison of combo INDUSTRY for Question E1 and A1 - E4 and A4

PP	Unimportar	Neutral	Important
Chemical A	0	0	6
Chemical E	1	0	5
Energy A	3	2	2
Energy E	2	1	4
Indusrial A	0	0	5
Industrial E	1	0	4
PetroChem	1	0	4
PetroChem	0	0	5
Technology	2	2	13
Technology	0	1	16
Services A	1	0	13
Services E	1	2	11
Other A	0	0	3
Other E	0	0	3
PP	Unimportar	Neutral	Important
Total Numt	5	4	48
Total Numt	7	4	46

E2	Unimportar	Neutral	Important
Chemical A	0	0	6
Chemical E	2	0	4
Energy A	1	0	6
Energy E	0	0	7
Industrial A	0	0	5
Industrial E	0	1	4
Petrolchem	1	0	4
PetroChem	0	0	5
Technology	0	2	15
Technology	1	3	13
Services A	0	1	13
Services E	1	1	12
Other A	0	1	2
Other E	0	0	3
FR	Unimportar	Neutral	Important
Prompted E	4	5	48
Unprompte	2	4	51

E3	Unimportar	Neutral	Important
Chemical A	2	1	3
Chemical E	0	0	6
Energy A	4	0	3
Energy E	1	2	4
Industrial A	3	0	2
Industrial E	0	0	5
Petrolchem	4	0	1
Petrochemi	2	0	3
Technology	8	2	7
Technology	3	2	12
Services A	8	1	5
Services E	1	0	13
Other A	1	1	1
Other E	0	0	3
IR	Unimportar	Neutral	Important
Unpromted	30	5	22
Promted E	7	4	46

E3	Important
Chemical E	6
Chemical A	3
Energy E	4
Energy A	3
Industrial E	5
Industrial A	2
PetroChem	3
Petrolchem	1
Technology	12
Technology	7
Services E	13
Services A	5
Other E	3
Other A	1

E4	Unimportar	Neutral	Important
Chemical A	0	3	3
Chemical E	0	0	6
Energy A	2	0	5
Energy E	1	0	6
Industrial A	5	0	0
Industrial E	1	1	3
Petrolchem	3	1	1
PetroChem	0	0	5
Technology	6	1	10
Technology	0	0	17
Services A	8	0	6
Services E	0	0	14
Other A	1	0	2
Other E	0	0	3
CC	Unimportar	Neutral	Important
Prompted E	2	1	54
Unprompte	25	5	27

Question E: # YEARS XPERIENCE/PP Total number of respondents with certain rating

E1/PP	0 not impo	1	2	3	4	5	6	7	8 very NB	9	10 tot		average	std dev
15+ Years	0	0	0	1	0	0	1	1	3	4	4	14	1.272727	1.61808
10<x<15	1	0	0	1	1	2	2	2	6	4	2	21	1.909091	1.758098
<=10 Years	0	0	0	0	1	2	2	2	5	6	4	22	2	2.144761
TOTAL	1	0	0	2	2	4	5	5	14	14	10	57		

E1/PP COI	0≤X<5	5	5<X≤10	
15+ Years	1	0	13	14
10<x<15	3	2	16	21
<=10 Years	1	2	19	22
Total	5	4	48	57

E2/FR	0 not impo	1	2	3	4	5	6	7	8 very NB	9	10 tot		average	std dev
15+ Years	0	0	0	0	1	1	1	2	3	4	2	14	1.272727	1.3484
10<x<15	0	0	0	1	0	2	3	5	2	6	2	21	1.909091	2.071451
<=10 Years	0	0	1	1	0	2	3	5	1	7	2	22	2	2.236068
TOTAL	0	0	1	2	1	5	7	12	6	17	6	57		

E2/FR COI	0≤X<5	5	5<X≤10	
15+ Years	1	1	12	14
10<x<15	1	2	18	21
<=10 Years	2	2	18	22
Total	4	5	48	57

E3/IR	0 not impo	1	2	3	4	5	6	7	8 very NB	9	10 tot		average	std dev
15+ Years	0	0	0	0	0	1	3	4	4	1	1	14	1.272727	1.61808
10<x<15	1	0	0	1	1	2	4	3	4	3	2	21	1.909091	1.445998
<=10 Years	0	0	0	2	0	3	4	5	4	2	2	22	2	1.843909
TOTAL	1	0	0	3	1	6	11	12	12	6	5	57		

E3/IR CON	0≤X<5	5	5<X≤10	
15+ Years	0	1	13	14
10<x<15	3	2	16	21
<=10 Years	2	3	17	22
Total	5	6	46	57

E4/C	0 not impo	1	2	3	4	5	6	7	8 very NB	9	10 tot		average	std dev
15+ Years	0	0	0	0	0	0	0	2	4	4	4	14	1.272727	1.848833
10<x<15	0	0	0	0	0	1	1	1	4	4	10	21	1.909091	3.080732
<=10 Years	0	0	0	0	0	1	0	5	5	1	10	22	2	3.286335
TOTAL	0	0	0	0	0	2	1	8	13	9	24	57		

E4/C COM	0≤X<5	5	5<X≤10	
15+ Years	0	0	14	14
10<x<15	0	1	20	21
<=10 Years	0	1	21	22
Total	0	2	55	57

Question E: INDUSTRY: PP/FR/IR/C: Total number of respondents with certain rating

	0 not impo	1	2	3	4	5	6	7	8 very NB	9	10	tot	average	std dev
E1														
Chemical	0	0	0	0	1	0	1	0	1	2	1	6		0.687552
Energy	1	0	0	1	0	1	1	0	0	1	2	7		0.6742
Industrial&	0	0	0	1	0	0	0	0	2	2	0	5		0.8202
Oil, Gas &	0	0	0	0	0	0	1	1	1	1	1	5		0.522233
IT	0	0	0	0	0	1	0	4	4	5	3	17		2.0181
Services	0	0	0	0	1	2	2	0	5	2	2	14		1.55505
Other	0	0	0	0	0	0	0	0	1	1	1	3		0.467099
	1	0	0	2	2	4	5	5	0	14	10	57		

E1	0<X<5	5<X<10	TOT
Chemical	**1**	**5**	**6**
Energy	**2**	**4**	**6**
Industrial&	**1**	**4**	**5**
Oil, Gas &	**0**	**5**	**5**
IT	**0**	**16**	**17**
Services	**1**	**11**	**14**
Other	**0**	**3**	**3**
	5	**48**	**57**

	0	1	2	3	4	5	6	7	8	9	10	tot	average	std dev
E2														
Chemical	0	0	1	0	1	0	2	2	0	0	0	6		0.8202
Energy	0	0	0	0	0	0	1	2	0	0	4	7		1.286291
Industrial&	0	0	0	0	0	1	1	1	0	2	0	5		0.687552
Oil, Gas &	0	0	0	0	0	0	0	1	1	2	1	5		0.687552
IT	0	0	0	1	0	3	0	4	4	5	0	17		2.0181
Services	0	0	0	1	0	1	3	2	1	5	1	14		1.55505
Other	0	0	0	0	0	0	0	0	0	3	0	3		0.904534
	0	0	1	2	1	5	7	12	6	17	6	57		

E2	0<X<5	5<X<10	TOT
Chemical	**2**	**4**	**6**
Energy	**0**	**7**	**7**
Industrial&	**0**	**4**	**5**
Oil, Gas &	**0**	**5**	**5**
IT	**1**	**13**	**17**
Services	**1**	**12**	**14**
Other	**0**	**3**	**3**
	4	**48**	**57**

	0	1	2	3	4	5	6	7	8	9	10	tot	average	std dev
E3														
Chemical	0	0	0	0	0	0	1	2	2	0	1	6		0.8202
Energy	1	0	0	0	0	2	1	1	0	1	1	7		0.6742
Industrial&	0	0	0	0	0	0	1	2	1	1	0	5		0.687552
Oil, Gas &	0	0	0	0	2	0	1	0	1	1	0	5		0.687552
IT	0	0	0	3	0	2	4	4	1	3	0	17		1.694912
Services	0	0	0	0	1	0	3	3	6	0	1	14		1.954017
Other	0	0	0	0	0	0	0	1	0	0	2	3		0.64667
	1	0	0	3	3	4	11	13	11	6	5	57		

E3	0<X<5	5<X<10	TOT
Chemical	**0**	**6**	**6**
Energy	**1**	**4**	**7**
Industrial&	**0**	**5**	**5**
Oil, Gas &	**2**	**3**	**5**
IT	**3**	**12**	**17**
Services	**1**	**13**	**14**
Other	**0**	**3**	**3**
	7	**46**	**57**

	0	1	2	3	4	5	6	7	8	9	10	tot	average	std dev
E4														
Chemical	0	0	0	0	0	0	0	2	2	0	2	6		0.934199
Energy	0	0	0	0	1	0	0	1	2	1	2	7		0.80904
Industrial&	0	0	0	0	1	1	0	1	1	0	1	5		0.522233
Oil, Gas &	0	0	0	0	0	0	0	0	2	2	1	5		0.8202
IT	0	0	0	0	0	0	0	2	3	3	9	17		2.769969
Services	0	0	0	0	0	0	0	2	2	3	7	14		2.195036
Other	0	0	0	0	0	0	0	0	1	0	2	3		0.64667
	0	0	0	0	2	1	0	8	13	9	24	57		

E4	0<X<5	5<X<10	TOT
Chemical	**0**	**6**	**6**
Energy	**1**	**6**	**7**
Industrial&	**1**	**3**	**5**
Oil, Gas &	**0**	**5**	**5**
IT	**0**	**17**	**17**
Services	**0**	**14**	**14**
Other	**0**	**3**	**3**
	2	**54**	**57**