UNIVERSITY OF CAPE TOWN

CAPE TOWN BUSINESS SCHOOL

BY

JEAN-PAUL BERTHON

1999

TECHNOLOGY OR CUSTOMER ORIENTATIONS:
THEORY AND SCALE DEVELOPMENT

DISSERTATION SUBMITTED IN FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF PHILOSOPHY

DECLARATION

I declare that, with the exception of the assistance acknowledged, this dissertation is the result of my personal research/investigation. Other sources of information are stated in the notes and bibliography.

This dissertation has not been accepted in substance for any degree, and is not being concurrently submitted in candidature for any other degree.

This dissertation is being submitted in partial fulfilment of the requirements for the Degree of Master of Philosophy.

I hereby give consent for my dissertation, if accepted, to be available for photocopying and for inter-library loan, and for the title and summary to be made available to outside organisations.

Signed:

Jean-Paul Berthon
(Candidate)

Professor Deon Nel
(Supervisor)

ACKNOWLEDGEMENTS

Firstly, I would like to thank my family for their time, advice and support throughout the past years.

Secondly, I would like to thank my supervisor Professor Deon Nel for his keen interest and guidance offered during this study. I would like to extend a very special thanks to Professor Leyland Pitt of Cardiff University, UK, and Professor Pierre Berthon of the University of Bath, UK, without whose help this dissertation would not have been written.

Finally, I would like to thank all the managers who took the time out of their busy schedules to complete the questionnaire to make this study possible.

ABSTRACT

The issue of the relationship between innovation and market orientation is a vexing yet vital problem for researcher and practitioner alike. The recent strategic management and marketing literatures have featured an ongoing debate concerning these philosophies as guiding templates for the way in which organisations conduct their business activity.

This dissertation takes as its theme this central tension. Specifically, it focuses on the dialectic between marketing and innovation. The contrast between serving and creating customers is explored and the sometimes-uneasy relationship between an innovation and a customer orientation is examined in the light of both philosophical origin and contemporary research. From this discussion, a model that provides an inclusive paradigm is developed. The resulting archetypes and their inter-relationships are then discussed and related to the different strategies that firms have used to resolve the tension. The dissertation then explores the dynamics of the change process for several well-known companies, based on the insights generated by the model. Managerial implications of the model are explored, with a particular emphasis on how new technology is changing the desirability of alternative strategies.

Having specified and explored the model on a conceptual level, the dissertation then goes on to operationalize the framework. Specifically, a measurement scale to assess the extent to which a firm or a business corresponds to a particular archetype is developed. Tests of reliability and validity are conducted. The results indicate in four clearly defied factors that correspond to the archetypes in the model. The use of the model and scale for management and academics are discussed.

CONTENTS

TECHNOLOGY OR CUSTOMER ORIENTATIONS: THEORY AND SCALE DEVELOPMENT

CONTENTS

CHAPTER 1

INTRODUCTION

1.0 Introduction

In this chapter the dichotomy between customer and product orientation is introduced as a variation on a very well-established theme suggested by, and traced back to, Peter Drucker over forty years ago. This is extended and modelled in a two-by-two matrix, which permits the identification of four strategic archetypes, which are introduced and discussed. This provides a basis for the rest of the thesis which then proceeds as follows: In Chapter 2, the literature concerning market and product orientation is reviewed. This forms the basis for the formulation of hypotheses in Chapter 3. In Chapter 4 the methodology employed to test the hypotheses is described. Chapter 5 reports the results of the study conducted to test the hypotheses. These results are then discussed in chapter 6, which also considers the implications of the research for both practitioners and academics, and identifies areas for future research.

1.1 Customers or Products? The Strategic Decision

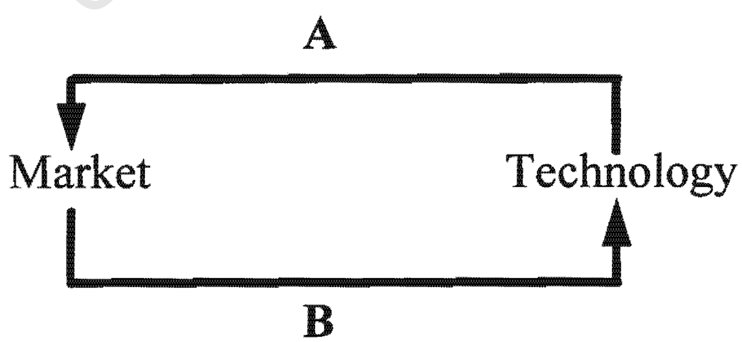
Since Peter Drucker stated in 1954 (Drucker 1954) that the sole purpose of a firm was to create and keep customers, marketers and indeed many managers have been beloved of a philosophy loosely called the "marketing concept". The conjecture is that in order to be successful, organizations should attempt to ascertain the customer's needs and wants, and produce the products and services that will satisfy them. Moreover, the organization should focus its very being on doing this, and structure itself in a way that permits everyone within it to orientate themselves towards customers. Some academics and practitioners claim that being market orientated is the key to organisational success, and point to tentative empirical research. However, the evidence is hardly definitive, with some companies finding that markets can mislead as well as inform. Others argue for product orientation, pointing out that technology can create markets, and that being first to the market combined with continual innovation is the key to survival in a turbulent business environment. However, while there have been successes from this perspective, there have also been well-documented failures: Firms who found that the fickle customer didn't want the product after all, and companies who discovered too late that the product which worked so well in the lab didn't find success in the marketplace.

There is ample indication that much achievement in the recent past, and perhaps even more in the future, might come from anticipating customer wants. As attempts to merely interpret and respond to customer wants become ubiquitous, so does the opportunity to sustain competitive advantage by such approaches become rarer. Although there may be more risk inherent in strategies which target latent needs and wants, i.e. those which customers might not be able to articulate, assuming such risk is likely to become ever more central to competitive advantage. Further, if needs and wants continue to evolve rapidly, firms will increasingly be aiming at a moving target in any case. Given the lags inherent in even a radically re-engineered innovation process, by the time a firm gets its new technology to market, it will be virtually impossible to avoid betting on what customers will really desire. Recently these issues have been raised by Berthon et al. (Berthon, Hulbert and Pitt, 1996). In this chapter the focus is on the role of organizational structure in anticipating customer wants: is there a best way to shape the organization in order to anticipate customer wants and have the right technology ready? In doing so a focus on the market is considered, and a focus on technology, and the interaction between these. Four alternative modes of interaction between market and technology are identified, and the managerial implications of these modes then discussed.

1.2 Markets and Technologies

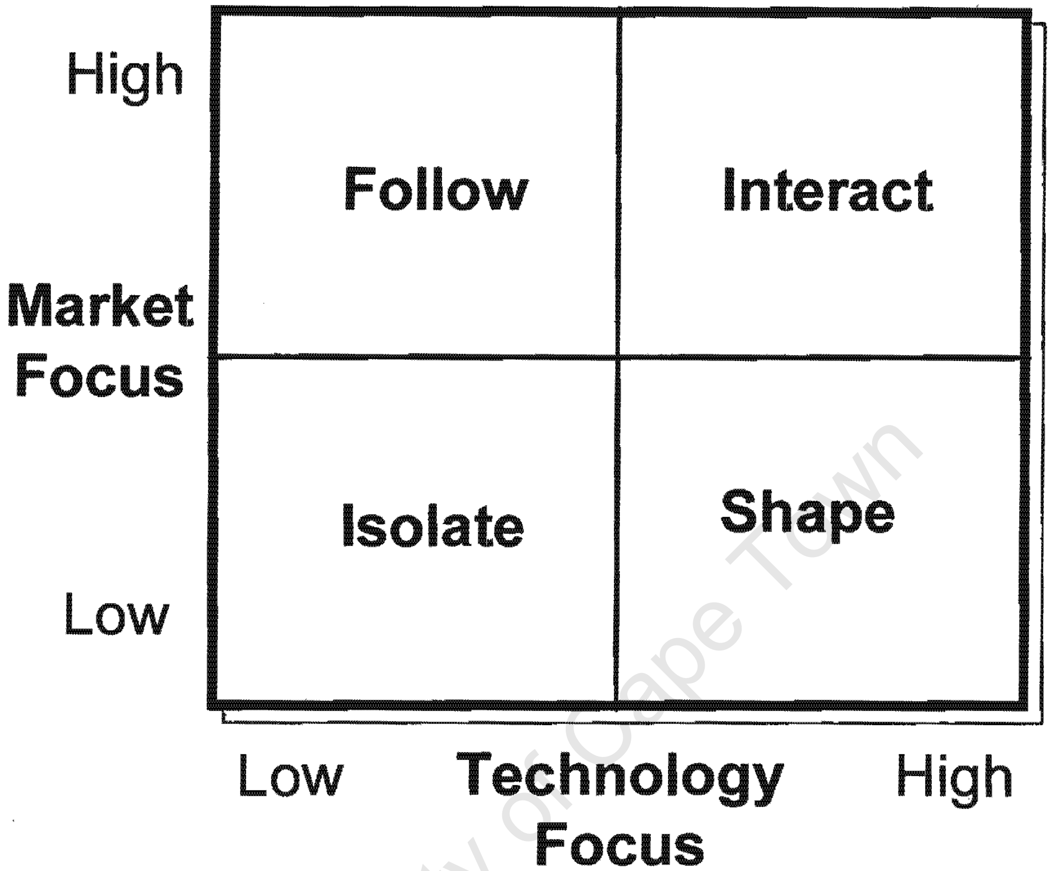
The potential relationship between technology and the market is that of a two-way nature as shown in figure 1.1 (Berthon, Hulbert and Pitt 1996) below.

Figure 1.1 The Interaction Between Market and Technology



The flow from the market to the technology (represented by the letter B) usually comprises traditional market research, but also includes informal knowledge and observation of the market by managers and others. On the other hand there is the flow from the technology to the market (represented by the letter A) - technology changes people's perceptions, their expectations, and their preferences. Thus, managers and their companies learn from the market, and the market (customers) learns from the product. This two-way flow, or dialogue is present, to a greater or lesser extent, for every product or service in every market. However, for any one organisation the degree of focus and thus communication each way can vary substantially. This enables the identification of four archetypal configurations, delineated in the matrix shown in figure 1.2 below.

Figure 1.2 The Four Strategic Archetypes



Each archetype is now described in turn.

1.2.1 The Isolate Mode

In the **Isolate** mode, there is little or no communication between technology and the market. Technology is developed for its own sake, and is not market driven, nor is the market modified in any appreciable way by the presence of technology. This is the classic "isolationist" mode in which either little product development occurs, or what is done happens irrespective of market needs, even despite them. Simply, there is no meaningful communication between product and market - they evolve or stagnate along separate paths. This mode characterized the British motor car and motor cycle industries during the late 1960s, and especially the 1970s. Little serious product development was undertaken, and what was done was often tangential to market preferences.

1.2.2 The Follow Mode

The market drives the technology in the **follow** mode. The firm relies heavily on both formal, or structured (using surveys) and informal or unstructured ("walking in the customer's shoes") market research to establish the parameters of products and services, and to drive their development. This can either be from scratch, in the case of new product development, or from an established position, where the product or service is refined. Examples of the former were the development by Toyota of the Lexus, where they attempted to establish exactly what the market would require of a luxury saloon car before attempting to build it. Similarly, the Courtyard concept by Marriott Hotels, where frequent business travellers were involved in conceptualising the ideal budget business accommodation. An example of the latter would be Jaguar's ongoing refinement of the XJ series.

1.2.3 The Shape Mode

The instance where technology is the focus rather than the market is referred to as a **shape** strategy - technology shapes the market. Indeed, the market may not have even been aware that it needed or wanted the benefits derived from a particular technology until it became available. The product becomes quintessential in shaping or defining a given market. This typically occurs in two areas: the forming of expectations and the forming of prototypical preferences. Thus for example, Japanese auto manufacturers followed the former in the 1970s by loading their products with extras not normally available in other non-Japanese manufacturer's cars. Customer's expectations were raised, and they began to question why these extras were not available in the initial products of other manufacturers. Examples of the latter strategy are Land Rover in the UK, and Jeep in the USA, in defining the four wheel drive utility market. These manufacturer's shaped what consumer psychologists call the customers' category prototypes, and disproportionately influenced the criteria against which customers evaluated other later entrants to the market.

Shaping is an interesting strategy because it is manifest in two distinct forms: *defining* and *influencing*. The *defining* strategy is that often serendipitous series of events which leads to a product defining a market. Thus Sony's Walkman defined the market for portable personal music systems - despite the fact that as a piece of technology, Sony's marketing department felt strongly that hardly any market research had been done, and suggested the market wouldn't want it. The idea of the Walkman (a compact cassette player with small earphones for highly portable listening), came from the company's founders, Masaru Ibuka and Akio Morita. Mr Morita, who purposely visited places where young people congregated, found that they wanted to listen to music on a very personal basis, especially if the sound was loud rock music. He charged the engineers with developing small high quality earphones and a simple light tape player. When the marketing people heard of the project, they did not think such a system would sell well – after all, the cassette could only play, not record, and no real marketing research had been done. Morita said, "No, keep it small and simple". Despite marketing's scepticism, Morita was confident that there was a market for the product. The Walkman sold out instantly upon introduction.

In the *influencing* mode, products influence market expectations and trends, but in and of themselves do not define the market, nor necessarily capture it. For example, Apple's Macintosh defined what most customers wanted in a personal computer - a user-friendly tool with a graphic interface that did not require technical computing skills. It did not go on to dominate the PC market. Freddie Laker's ill-fated airline venture did not delimit the air travel market, but did drastically shape the expectations and perceptions of travellers concerning the price of Trans-Atlantic travel.

Lest the impression be created that all shaping strategies are good and necessarily productive, it should be pointed out that a great many fail. Successful shaping requires the placing of two large bets, one on technology and the other on the market. Failure rates in developing new technology are notoriously under-estimated because of a tendency to sink without trace. Failure to shape, however, is equally common for a second reason, namely technological pioneers often have a poor understanding of market and customer learning processes.

1.2.4 The Interact Mode

In the **interact** mode, a true dialogue is established between the market and technology. In a sense a dialogue is present over time in any marketplace, but at any one time firms are often engaged in a monologue. The term dialogue is appropriate here because it uses the metaphor of speech to underpin the market-technology relationship, providing a spectrum ranging from "conversation" to "negotiation". The term conversation conjures up the image of a fairly genteel two-way flow of information, ideas, offered, modified, and evolved. Negotiation sums up the harder image of a power play between products and markets, where there are trade-offs of values and features. Many industrial markets operate in the negotiation-interact mode - a prospective customer publishes a bid or tender and invites potential suppliers to submit their offers before moving toward the next step in the development of the product or service. Similarly, bespoke tailors have for years involved their customers in conversational dialogues concerning the product that they will in a very real sense "co-produce".

History provides a number of examples of the interaction mode. Many of the early automobile manufacturers at the upper end of the market, such as Bentley, Duesenberg, Alvis and Bugatti co-operated with independent coach builders to make cars to owners' specifications. Nowadays there is much talk in marketing circles of mass customisation, "segment of one" markets, and "one-to-one" marketing strategies, and the "market of one" will ultimately be matched by a "product of one". These approaches clearly fit the interact mode albeit on a micro scale. Recent developments on the Internet, and particularly the World Wide Web, offer some ideal opportunities to expand the interaction mode: customers and manufacturers will be able to enter into a dialogue regarding the design of a product or service, its delivery and modes of payment.

1.3 Changing Modes Over Time

Obviously there can be movement among the modes over time. For example, initially a product may be developed to meet a specific market need (**follow**), or it can define a market (**shape**). Over time a shaper might become a follower, lapse into isolation, or become truly interactive. There is a temptation to be normative about which mode to pursue - devout but unimaginative marketers might espouse a following strategy, engineers and technologists a shaping strategy, and strategists, the interaction mode. Even an isolation strategy might have adherents. After careful thought, however, interaction would probably get the popular vote. Unfortunately, reality is seldom that simple. Dialogue and interaction may be expensive at best, and irrelevant at worst. Further, though they may reduce risk, we can also argue they are less likely to produce either the breakthrough product or service that characterise the successful shaper or the devotion to true customer satisfaction that good followers are able to deliver. More generally, however, we would reason that any change of mode is more likely to be accidental than planned. Firms typically establish and embed approaches to technology and market deeply in their cultures, and are unlikely to change unless presented with a strong threat to their survival.

It is similarly easy to argue that the efficacy of a particular mode is partly contingent upon the characteristics of a specific business environment. In a very stable environment, an isolate strategy might be effective and economical. After all, why spend precious resources on market research when customer preference sets are relatively stable. In contrast, with complex and rapidly evolving needs and wants, combined with a variety of technological alternatives - characteristics pertaining to more and more markets - an interactionist approach would appear mandatory. However, such simplification might be dangerously deceptive. It ignores the critical role of strategy and the goals of competitors. The essence of competitive strategy is to create disequilibrium, so that the consequences of imbalance are more favourable to the firm which initiated them. Surprise - and thus an element of contrarianism - are therefore central to the strategy and organization game. These cycles of near–equilibrium and dis-equilibrium are the life-blood of competitive markets, creating the waves of discontinuity which bring ever-greater value to customers in competitive markets. In this view, stability is but a temporary illusion, and the market-technology dialogue will be ongoing.

1.4 The Development of an Instrument to Assess Strategic Archetype

The intention in this dissertation is to assess the psychometric properties of a scale developed to determine strategic mode. The TOCO (technical orientation – customer orientation) scale is suggested by Berthon, Hulbert and Pitt (1998). However, the scale has not yet been used extensively, nor have any properties of this scale been evaluated or assessed. Thus, following the directions of Churchill (1979) for the development of scales in marketing, and also the directions of Peter (1979; 1981), with regard to reliability it is proposed to test the properties of the TOCO scale by means of empirical study.

1.5 Summary

This chapter has introduced the dichotomy between customer and product focus in organizations, drawing on the early work of Peter Drucker, and the more recent work of Berthon, Hulbert and Pitt. This was extended and modelled in a two-by-two matrix that allows the identification of four strategic archetypes, which were introduced and discussed. This chapter provides a conceptual basis for the rest of the thesis which will now proceed as follows: In the next chapter, Chapter 2, the literature concerning market and product orientation will be reviewed, which will form the basis for the formulation of hypotheses in chapter 3. In Chapter 4 the methodology employed to test the hypotheses will be described. Chapter 5 will report the results of a study conducted to test the hypotheses. These results will then be discussed in Chapter 6, which will also consider the implications of the research for both practitioners and academics, and identify areas for future research.

CHAPTER 2

LITERATURE REVIEW: MARKET ORIENTATION AND BEYOND

2.0 Introduction

In this chapter a central tension in management is reviewed - the tension between marketing and innovation, tracing its roots back to one of the architects of the post-war business paradigm - Peter Drucker. First, the recent literature on market orientation is reviewed. Then, more specifically, the contrasting views of serving vs. creating a customer, of marketing vs. innovation orientation are explicated. From this discussion, a model that provides a more inclusive paradigm is delineated. The resulting archetypes and their inter-relationships are discussed. Implications for the practitioner are then developed. The chapter concludes by exploring the dynamics of the change process for several well-known companies, based on the insights generated by the model.

2.1 Should firms be market-oriented?

In recent years, there has been a revival of interest in market orientation and what it involves. While its importance has been relentlessly expounded by business schools, underlying, as it does, any marketing course and indeed the entire marketing discipline, there have been fewer attempts to define the construct, and delineate what market orientation really means. Furthermore, while it is held that one of the major reasons for its importance is that the market orientation of a firm results in improved business performance, this link appears to have had little empirical support. What confirmation there is, comes from the USA (Jaworski and Kohli 1993; Narver, Park and Slater 1990; Narver and Slater, 1990; Reukert, 1992) and Europe (Caruana, Pitt and Berthon, 1996). Kohli, Jaworski and Kumar (1993) have suggested that their instrument for the measurement of market orientation, MARKOR, provides an adequate means for the measurement of market orientation.

In their 1993 work Kohli, Jaworski and Kumar (1993) emphasise the need for further work of a replicative nature to be done with MARKOR, especially in other cultures and other organizational settings. Moreover, there is no more fundamental requirement in science than that the replicability of findings be established (Epstein 1980), and in the marketing discipline the role of replication has at best been a tenuous one: 'Research is not only a creative process, it is a discipline. Some concertos are best understood by being played more than once' (Easley, Madden and Dunn, 1994). It should also be noted that replicative studies do not need to be conducted in identical ways, nor is the data analysed, or presented, in exactly the same way each time. As Brown and Gaulden [1984] point out, this is indeed acceptable practice in research, and frequently adds valuable insights if replication is to add to the development of theory. It is not absolutely essential that replications of studies be clones of those studies.

2.1.1 On Market Orientation

The market oriented firm is one which successfully applies the marketing concept. The term 'market' oriented is to be preferred to 'marketing' oriented as this highlights its organisation-wide application (Kohli and Jaworski, 1990; Narver and Slater, 1990; Shapiro, 1988). On the other hand a marketing orientation is seen to be specific to the activities of the marketing department or division. McGee and Spiro (1988) hold that the marketing concept can be defined in three ways: as a philosophy, as a concept and as currently implemented. Much of the confusion over the years in defining marketing and in the understanding of the marketing concept results from a failure to make these three distinctions between marketing as a culture, as a strategy, and as a tactic. Each of these dimensions is the responsibility in the organisation of the corporate, SBU and the operational levels, respectively (Webster, 1992).

2.1.1.1 Market Orientation As A Philosophy

There is broad agreement that market orientation as a philosophy consists of three core aspects (Kohli and Jaworski, 1990; Kotler, 1991; McGee and Spiro, 1988; Runyon, 1980). These are:

1. *Customer orientation.* This essentially requires an understanding of the psychological and social factors that determine the customer's action. Such an understanding enables the marketer to ask the market research questions that enable the identification of core needs which in turn will give clear direction to basic research. This is essentially Levitt's (1960) argument against 'marketing myopia', the necessity for firms to identify the basic customer needs that they serve, and define their business accordingly.

2. *The integration of effort.* This enables the firm to provide the value to meet customer needs. It involves the need to co-ordinate effort in terms of the elements of the marketing mix for each product. Moreover, because market orientation is an organisation-wide prescription, it is necessary that the whole firm is organised and co-ordinated in the service of the customer.

3. *Organisational objectives* (or, in the case of business firms, profitability). In adopting the marketing concept the organisation seeks to serve customer needs in order to meet its requirements for achieving objectives/profit. This is essential for long-term survival. Market orientation, from the beginning, was formulated with a view to providing the organisation with long-term direction (Felton, 1959; McGee and Spiro, 1988; Webster, 1988; Narver and Slater, 1990). Many managers however, especially in Western firms, must balance this against the demands they face for short-term performance. To these three core aspects of the marketing philosophy, Kotler (1991) also adds 'market focus' and appears to imply that a segmentation policy is a must. However, in certain circumstances an undifferentiated offering can represent an exemplary use of the marketing concept (Houston, 1986).

2.1.1.2 Market Orientation as a Construct, and its Operationalization

Kohli and Jaworski (1990) have contributed by providing an operational definition for market orientation as a construct. In their work, they do this by comparing the three core elements of market orientation as a philosophy, to the perceptions of practising managers. Their work enables them to offer the following:

'Market orientation is the organisation-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organisation-wide responsiveness to it.' Kohli and Jaworski (1990)

Market intelligence is seen to be not just based on 'verbalised customers' opinions' but 'a broader concept' in that it includes consideration of: (1) exogenous market factors (e.g. competitors, regulation) that affect customer needs and performance and (2), current as well as future needs of customers. Grönroos (1991) recognises the need for a firm to have a strong information system especially in the case of those 'in a relationship marketing situation'. Recent work by Jaworski and Kohli (1993), following the approach suggested by Churchill (1979), utilised the market intelligence related activities of their definition to develop a measuring instrument for market orientation. The alpha coefficients (Cronbach, 1951) reported for each subdivision of this instrument are greater than 0.70, and are therefore acceptable for theory development (Nunnally, 1978). At least three other scales for measuring market orientation based on different emphasis in their conceptualisation of market orientation as a construct have also been developed (Deshpandé, Farley and Webster, 1993; Narver and Slater, 1990; Reukert, 1992).

2.1.1.3 Market orientation as implementation

The level of market orientation of a firm depends on the degree of implementation of the marketing concept. The significant criticism the marketing concept has received (Hayes and Abernathy, 1980; Kaldor, 1971) appears to have been a problem with implementation (Houston, 1986; McGee and Spiro, 1988; Webster, 1988). Perhaps this is because it appears that there has been no complete agreement as to what constitutes market orientation. What is often implemented in the name of a market orientation may therefore differ considerably. It is thus not surprising that Kotler asks:

> 'But how many companies have actually implemented the marketing concept? The answer is too few. Only a handful of companies really stand out as master practitioners of the marketing concept... .' Kotler (1991, p22)

When the product offering cannot or will not be changed, a market orientation is difficult to implement. In such cases as religion, art, and ideology, where profit is not a concern, some of the tools of marketing can be used, but the fixed nature of the product or offering, limits manoeuvrability. Hirschman (1983) has investigated artists and ideologists and suggests that a study of the exchange process and the value transfers involved, could help build a modified marketing concept.

2.1.2 The Market Orientation - Business Performance Link

Strategic business units in some US firms are reported to exhibit a direct link between their levels of market orientation and performance (Jaworski and Kohli, 1993; Narver, Park and Slater, 1990; Narver and Slater, 1990; Reukert, 1992). Deshpandé, Farley and Webster (1993) also confirm this relationship in Japan. Until recently this linkage appears to have been taken for granted by both academics and practitioners (Houston, 1986; Kotler, 1991; McGee and Spiro, 1988; Webster, 1988; Kohli and Jaworski, 1990). In investigating the market orientation - business performance link, Kohli and Jaworski (1990), saw this as being influenced by four moderators, namely: market turbulence; technological turbulence; competitive intensity; and performance of the economy, which also suggests the possible impact of a national economy and culture on market orientation. However, their subsequent work found the link to hold irrespective of the first of these three variables (Jaworski and Kohli, 1993). Narver and Slater (1990) identified nine moderators on the market orientation - business performance link, to which Narver, Park and Slater (1990) add a further moderator. Dobscha, Mentzer and Littlefield (1994) argue that external factors may have an effect on market orientation itself rather than simply acting as moderators on the market orientation-business performance link. The work of both Narver and Slater, and Jaworski and Kohli only confirm the relationship between market orientation and performance for a number of SBU's in a limited number of US firms. Nevertheless, since the theory establishes a clear link between the market orientation of firms and their achievement of their objectives/profit, it is expected that this relationship should also extend to whole companies, in different industries, and in different countries and cultures.

2.2 Beyond Market Orientation: A Neo-Synthesis for Strategic Market Success

2.2.1 Introduction

Among the various philosophies that have competed as guiding templates for the way in which organizations conduct their business activity, two stand out. A technology philosophy asserts that customers will prefer those products and services that provide the greatest quality, performance and features - in short, technological superiority (cf. Smith, 1980; Clark and Fujimoto, 1991; Kodama, 1995; Utterback, Allen, Hollomon and Sirbu, 1976). Managers in firms that enact a technology philosophy devote their energy towards *innovation* - that is inventing and refining superior products and services. In contrast a marketing philosophy contends that *identifying* the needs and wants of the target market, and delivering products and services that satisfy these is key to the attainment of organizational goals (cf. Band, 1991; Day, 1990, 1994; Naumann, 1995; Webster, 1988). Discussion of the technology philosophy generally refers to issues such as new products, innovation, and discontinuous improvement, while discussion of the marketing philosophy generally concerns matters such as customer service, customer satisfaction and customer focus. It is quite tempting to see these philosophies as mutually exclusive - if not conceptually opposite. This situation is exacerbated by the fact that academics and consultants often focus and specialize in one or the other area, develop criteria of excellent practice, and claim these as panacea for business success. Others, however, have focused on the need to integrate technology and market (cf. Gupta, Raj & Wilemon, 1986; Souder, 1987; Shanklin and Ryans, 1984). Yet while there are few instances of firms applying one as a management philosophy to the exclusion of the other, firms do in practice tend to place greater emphasis on one or the other philosophy - an unsurprising situation given limited resources.

In this dissertation we begin by tracing the intellectual roots of the marketing and technology philosophies, and recast the latter as innovation orientation. The modern marketing concept's divergence and differentiation from the innovation concept is discussed. Next, we introduce a more inclusive model, explore the resulting archetypes and their inter-relationships, and develop implications for researchers and practitioners. The paper then explores the dynamics of the change process. Using three well-known companies, the model is employed to explore and add insight into the evolving strategies that emerge from a dynamic market place. We conclude by proffering a diagnostic for the identification of four strategic archetypes.

Much of the challenge revolves around innovation and the pre-existence or otherwise of customer needs and wants. This is a manifestation of a central tension in management - the uneasy relationship between marketing and innovation. In the post-war era, however, we can trace this duality to one of the architects of the post-war business paradigm - Peter Drucker.

2.2.2. Background

Since Peter Drucker stated in 1954 that the sole purpose of a firm was to create and keep customers (Drucker, 1954), marketers and, indeed, many other managers have been beloved of a philosophy loosely called the "marketing concept". As interpreted by many disciples, the concept evolved to the advice that in order to be successful, organizations should attempt to ascertain the customer's needs and wants, and produce the products and services that will satisfy these. Its most enthusiastic proponents argue that companies should focus their very being on doing this, and structure themselves such that everyone within them is oriented towards customers. Indeed, some adherents (e.g. Kohli and Jaworski, 1990; Jaworski and Kohli, 1993; Kohli, Jaworski and Kumar, 1993; Narver and Slater, 1990; Slater and Narver, 1995) argue that being market oriented is a key to organizational success, pointing to the limited body of empirical research on the subject as evidence to support their views.

2.2.3 Re-examining the Marketing Concept

Peter Drucker rightly receives considerable credit as a progenitor of the marketing concept. Too often forgotten, however, is the fact that the concept in question was a concept of a business, not a function, as the following excerpt makes clear:

> 'if we want to know what a business is we have to start with its *purpose*. There is only one valid definition of business purpose: *to create a customer*. It is the

customer who determines what a business is. For it is the customer, and he alone, who through being willing to pay for a good or service, converts economic resources into wealth, things into goods. What the business thinks it produces is not of first importance - especially not to the future of the business and its success. What the customer thinks he is buying, what he considers "value" is decisive...... Because it is its purpose to create a customer, and business enterprise has two- and only these two - basic functions: marketing and innovation.' (Drucker, 1954: 37).

The emergence of today's marketing concept from Drucker's formulation was in a sense ineluctable. As generally accepted, the marketing concept has its genesis in a focus on the customer - finding out what the customer needs, wants and values, and delivering this as expeditiously and economically as possible. The 'how' (the product or service itself) is secondary in this process - a simple means to the end of a satisfied customer. The quintessential focus of a business is the customer, and *marketing* is the realization of this process.

However, we regard it as central that Drucker spoke of *creating* a customer, rather than *serving* a customer. This combined with the injunction to *innovate* - suggests a less well-articulated aspect of Drucker's original vision. An aspect of business which comes *before* the customer, which *creates* the customer, and is quintessentially concerned with *innovation* - the creation of innovative products[1]. Reflecting on this principle soon reveals its logic. In many instances, needs, wants, and values co-arise when products are created. For example the computer has spawned whole industries addressing the health care needs (e.g. eye and back problems, RSI and related illnesses) of people who interface with computers for prolonged periods (c.f. Hayes, 1995). The innovation of products engages peoples' minds and imaginations, thus creating customers. Disney creates the fantasy that creates the customer (c.f. Fjellman, 1992). These themes will be explored on ensuing pages. However, one last task remains before we continue. This concerns the relationship between serving a customer, creating a customer, marketing and innovation. One way of looking at these elements is in terms of a cyclic process:

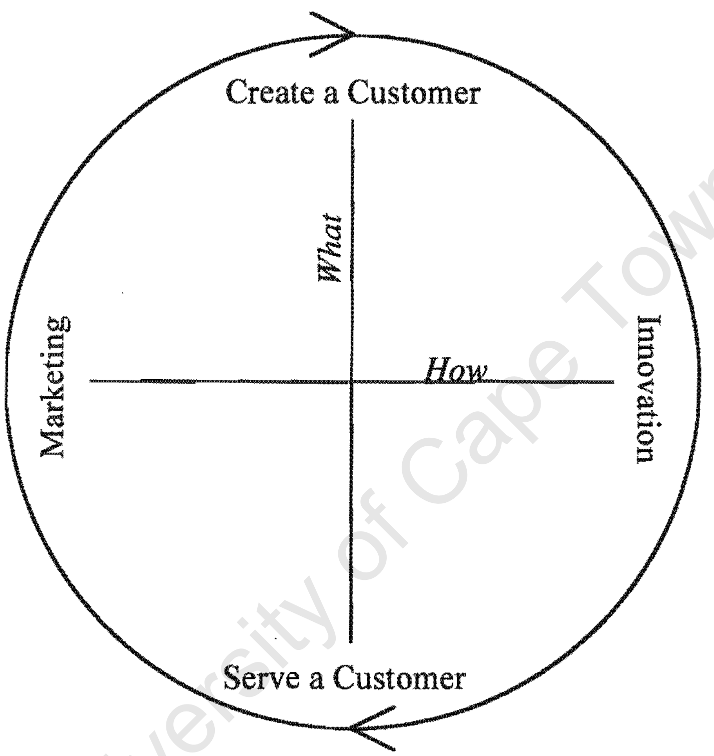
A business creates customers through innovation,

and it serves them through marketing.

Having once created a customer, it is incumbent upon a business (in a competitive market at least), to serve those customers. The cycle continues with further innovation. The process is outlined in Figure 2.1 below.

[1] The term product in its most catholic sense - covering an expanse from poetry to traditional material 'product', from teaching to technology, and from images to ideologies. Our use of the term product thus encompasses traditional products and services, but also includes ideas and images. Indeed in its original sense the term technology resonates closely with our thinking. Technology, from the Greek *tekhnologia* meaning 'systematic treatment' and more literally *tekhne* - art + - *logia* - ratio, reason, discourse; possibly captured in the term 'systematic-art'.

Figure 2.1: The Cycle of Creating and Serving a Customer - Through Innovation and Marketing.



The above model integrates the two sides of Drucker's vision. Innovation (creation/leading) and marketing (serving) are seen as opposite yet complementary functions.

Much recent research in marketing has tended to focus on the one side or aspect of Drucker's vision (e.g. Narver & Slater, 1990; Slater & Narver, 1995; Kohli and Jaworski, 1990; Jaworski and Kohli, 1993; Kohli, Jaworski and Kumar, 1993). Researchers in the area of market orientation have defined the market-oriented firm as one which successfully applies the marketing concept (cf. Kohli and Jaworski, 1990). In doing so, however, is there too much emphasis placed in the market orientation research and literature on the *serving* function of the marketing concept, at the expense of customer *creation*? If Drucker believes that the *two* functions are indispensable, then surely the impact of one should be explored contemporaneously with the other, both theoretically and empirically? As a second progenitor of modern marketing argued:

> 'A company committed to the marketing concept focuses its major innovative effort on enlarging the size of the market in which it participates by introducing new generic products and services, by promoting new applications for existing products, and by seeking out new classes of customers who heretofore have not used the existing products ...... Only thinking of the customer and mere technical proficiency in marketing both turn out to be inferior hands when played against the company that couples its thought with action and actually comes to market with a successful innovation.' (McKitterick, 1957).

It is indeed striking that right from the beginning, both the progenitors of the 'new' marketing concept stressed the vital importance of innovation. Webster summarized the case well when he wrote:

'Merely being "customer oriented" in the philosophical sense was not enough, nor was marketing skill, narrowly defined; constant innovation was also necessary to deliver better value to consumers in a competitive marketplace.' Webster (1994: 10).

We argue that the issue is not one of deciding on either a customer- or an innovation-focus. Rather, the challenges are to find ways to integrate the two, and to structure and manage firms in such as way that the focus on each achieves an optimal balance. To adjudge the theoretical merits of this more inclusive argument further demands that we ensure that the advice is not bound in time and space. To do this we need to examine the historical and environmental context in which the concepts were developed.

2.3 How marketing came to stress serving the customer over creating the customer

Initially it is somewhat perplexing as to why much of the recent marketing literature came to stress *serving* the customer over *creating* the customer. To expiate the genesis and evolution of the modern marketing thinking, we explore the role of environmental contingency and the desire on the part of marketers to distance themselves from the perceived negative side of marketing.

2.3.1 Environmental Contingency

In one of the classic articles in the marketing literature, Robert J. Keith, a Director of Pillsbury suggested that the desirability or otherwise of a market orientation is at a minimum contingent upon conditions in the market environment. In describing Pillsbury's progression from a production orientation (Producer Push), to a sales orientation (still Producer Push) to a marketing orientation (Customer Pull), and ultimately to marketing control (where marketing permeates the whole company) Keith points out that:

> 'In the early days of the company, consumer orientation didn't seem so important....no-one would question the availability of a market' (Keith, 1960, p. 37).

The move from marketing orientation to marketing control was basically a shift from short-term to long-term orientation, from marketing tactics and operations to overall business policy and strategy, all focused around the consumer. Indeed, in contemporary terms, he described vividly a shift from a functional or departmental view of marketing, to a pan-company view of marketing as a total business philosophy:

> 'Soon it will be true that every activity of the corporation - from finance to sales to production - is aimed at satisfying the needs desire of the consumer. When that

stage of development is reached, the marketing revolution will be complete' (Keith, 1960, p. 38).

For many years companies found adequate solutions to their competitive problems through a well-managed functional marketing operation (cf. Webster, 1994). It is only as competitive pressures have risen still further that a return to the more original role of marketing as a philosophy, or general management function is being contemplated, despite Keith's earlier optimism. In a similar manner, within a time-limited paradigm, serving the customer may well suffice to bring competitive advantage. Over the longer term, however, the critical importance of customer creation will surely emerge, for both D'Aveni (1994) and Dickson (1992) concur that existing advantage becomes progressively more ephemeral. In a comment that some would find remarkably prescient, however, Keith also concluded:

'There is nothing static about the marketing revolution...the old order has changed, yielding place to the new-but the new will have its quota of changes, too' (Keith, 1960,p.38).

2.3.2 Expediency: Avoiding the Dark Side

Another reason that the marketing has stressed the "serving the customer" side of the dialectic to the extent they have, may be in part due to the desire to eschew the dark side of what is seen as "marketing" by many consumers. This dark side sees marketing as manipulative, exploitative and in some cases unethical - marketing is seen as "making" customers (through appealing to conscious and unconscious dynamics) buy products they don't need, don't want and can't afford (cf. Bloom and Greyser, 1981). Perhaps overly-sensitized by the aggressive consumerism of the 1970's, and the polemics of critics like Packard (1957) and Galbraith (1967), a generation of marketers became recalcitrant about the truly creative part of the marketing job, the creation of wholly new markets, without which the evolution of technologies would surely slow. Indeed, only a small percentage of all products and services in today's developed economies can be classified as essential, and the contrast between these and deprived economies is palpable but far from palatable. Thus marketing's desire to play down its own Nietzschian "Will to Power" component has led with unerring logic to a state where all marketing statements revolve around "putting the customer first", "focusing on the customer", "serving the customer", "meeting pre-existent needs and wants" etc., rather than trumpeting the central role of customer creation in advancing technology and quality of life. Paradoxically, it was exactly the perceived need for this contribution that gave rise to the "modern" marketing concept in the first place!

2.4 Beyond market orientation: the return to innovation

For the customer, scarcity is a problem, and any problem for a customer represents a potential business opportunity. At the macro level, assuming freedom of entry and adequate purchasing power, scarcity should soon disappear. Dickson (1992), takes the argument further, suggesting that aggressive competition leads to over–supply, wherein customers are offered more choices, and thus become more sophisticated. As a consequence, achieving effective differentiation grows ever more difficult. Marketers' attempts to serve these more sophisticated consumers spur them to innovate, which in turn leads to imitation and back once more to oversupply. Paradoxically, then, while innovation becomes ever more essential, its advantages seem to dissipate just as rapidly. D'Aveni (1994) has taken this line of reasoning further to argue that a new cycle of discontinuous *innovation* is necessary to break the stalemate.

2.4.1 Marketing and Technology

Strong empirical evidence for the benefits of market orientation is still under construction. Many of the studies are thus far have been short-term, and are therefore, by definition, unable to answer the question of the long-term importance of radical innovation and R&D. Indeed some companies have found that markets can mislead as well as inform. For example, Ford of Europe built the Mk4 Escort around extensively 'broad' and 'deep' market research. When launched, the car was poorly received by both customers and journalists alike; sales volume had to be built through heavy discounting (cf. Martin, 1996). In some of its latest ventures, such as the Puma Coupe, Ford has consciously eschewed all market-research input (Car, 1997b). Indeed Ford has recently gone on record to state explicitly that it is now a product-led rather than market- or customer-led company (Bulgin, 1997). Elsewhere, Quinn (1992, p. 298) describes state of the art technologies like those of Cray Research, Genentech, Hughes Electronics and Kyocera being developed in freestanding technical units, not directly connected to formal marketing units. "Heads of these projects often know more about the technologies than anyone in the world, including potential customers. So long as demand in the industry to which they sell is driven solely by technical performance criteria, the lab head can essentially define the characteristics of the next generation of products." Good timing and technical performance predominate, not the fickle tastes and preferences of customers.

The rationale for a product or, more broadly, an innovation orientation is that technology can create markets and customers. Being first to a market combined with continual innovation is the key to survival in a turbulent business environment (D'Aveni, 1994; Hamel and Prahalad, 1991).

2.4.2 Competitive Arbitrage

There is ample indication that much achievement in the recent past, and perhaps even more in the future, might come from anticipating and creating customer wants (Carpenter and Nakamoto, 1989; Carpenter, Glazer and Nakamoto, 1994). It appears quite likely that attempts to interpret and respond to customer wants will become so ubiquitous that the opportunity to sustain competitive advantage by such approaches may well become scarce

(Gatignon and Xuereb, 1997: 87). Thus, although managers may perceive more inherent risk in strategies which target needs and wants which customers might not be able to articulate, assuming such risk is likely to become ever more central to competitive advantage. Indeed, Gatignon and Xuereb (1997: 87) make almost exactly this point in interpreting their recent empirical results, arguing that a synthesis of technological and customer orientation is well suited to markets where uncertainty is high.

2.4.3 Changing Needs and Environments

Another set of issues is raised by the pace of change and potential instability of customer needs and wants. If customer needs and wants continue to evolve rapidly, firms will increasingly be aiming at moving targets in any case. Given the lags inherent in even a radically re-engineered innovation process, by the time a firm gets its new technology to market, it will be virtually impossible to avoid betting on what customers will really desire. In the next section of the dissertation, we focus on this issue by developing a theoretical framework to help answer these difficult questions:

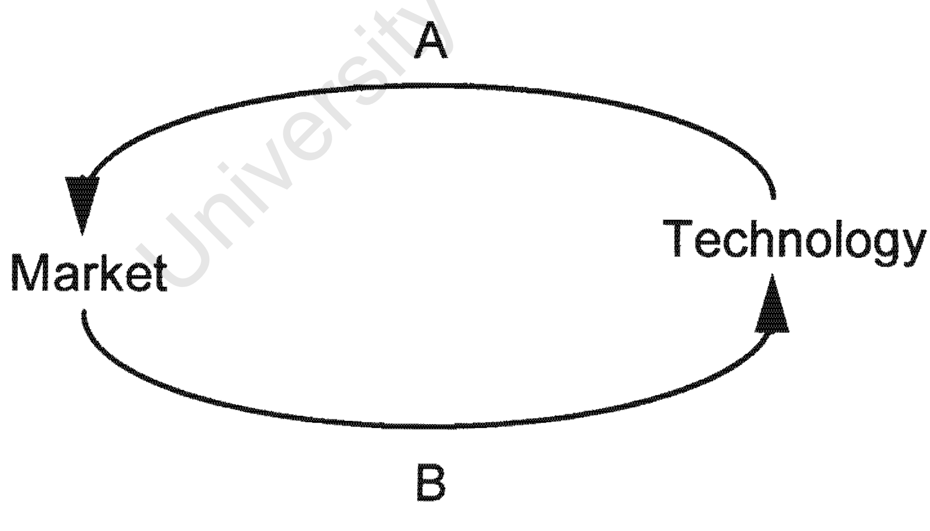
- Is there a best way to shape the strategy and organization in order to anticipate customer wants and have the right technology ready?
- Could this reshaping embody the keys to marketplace success in the next millennium?

In exploring these questions we consider a focus on the market, a focus on technology, and the interaction between these. We identify four alternative modes of interaction between market and technology, and then discuss the managerial implications of these modes.

2.5 Toward a Theoretical Framework

The potential relationship between technology and the market is of a two-way nature as shown in Figure 2.2 below.

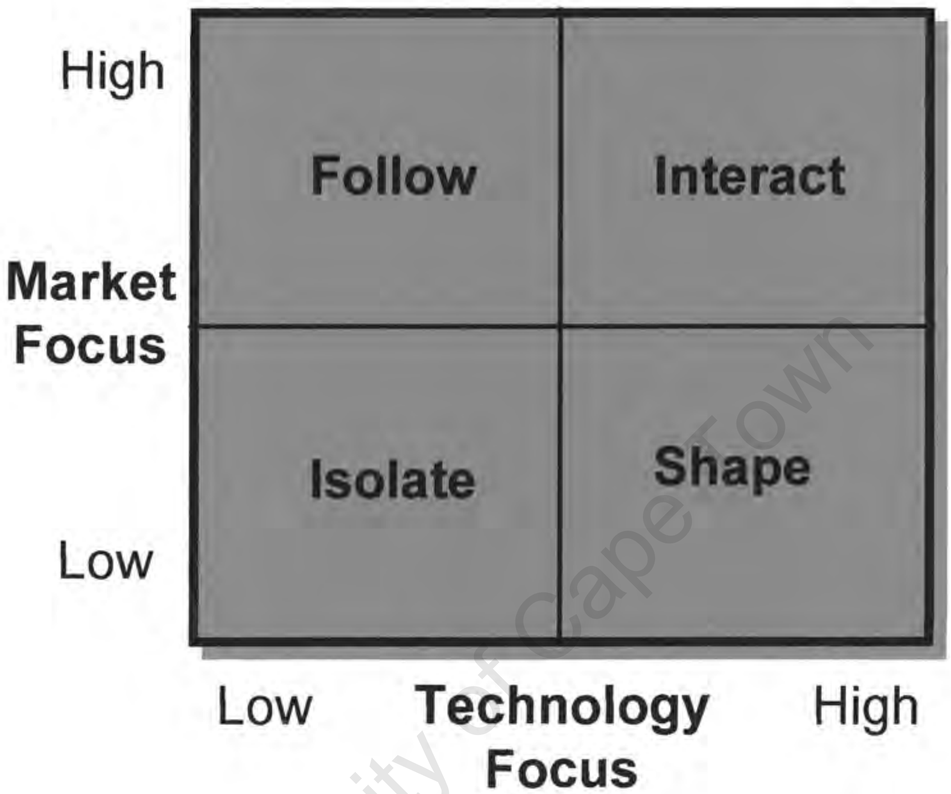
Figure 2.2: Technology/Market Communication Flows



The flow from the market to technology (represented by the letter B) usually comprises traditional market research. However it also includes informal knowledge and observation of the market by managers and others, as well as the more novel approaches to market research being used by some firms, such as "spending a day in the life of the customer" (Gouillart and Sturdivant, 1994), or immersion with their consumers or buyers (cf. Johanson and Nonaka, 1987). On the other hand there is also a flow from the technology to the market (represented by the letter A) - technology changes people's perceptions, their expectations, and their preferences. It also shapes the way people live, the way society is structured, and the manner in which human being conceptualize themselves – positively or negatively (e.g. Wiener, 1954; Mander, 1991). Saloner, quoted in a recent Economist argues that Silicon Valley, a hotbed of innovative companies, "works on a 'field of dreams' business plan: if you build something, customers will come" (Economist, 1997, p. S-17). While this may seem extreme, anecdotal examples of technologies changing markets are legion, and include the influence of the integrated circuit and the micro-processor on countless consumer durables, improving their convenience and functionality in ways that consumers enjoy but still do not fully comprehend. Thus, managers and their companies learn from the market, and the market (customers) learns from the product - as Carpenter and Nakamoto (1989) and Carpenter, Glazer and Nakamoto (1994) have demonstrated.

This two-way flow, or dialogue is present, to a greater or lesser extent, for every product or service in every market. However, for any one organization the degree of focus on technology and/or the market can vary substantially. By dichotomizing each of these dimensions, we can identify four archetypal configurations, delineated in the matrix in Figure 2. 3 below:

Figure 2.3: Strategic Archetypes



We now explore each archetype in turn.

2.5.1 Isolate

In the Isolate mode, there is little or no communication between technology and the market, the organization itself becomes the focus of its own attention: it becomes organocentric (c.f. Woodruff, 1997, p.139). Technology is developed for its own sake, and is not market-driven, nor is the market modified in any appreciable way by the presence of this technology. This is the classic "isolationist" mode in which either little product development occurs, or what is done happens irrespective of market needs, even despite them. Similarly, little or no market research occurs. Simply, there is no meaningful communication between product and market - they evolve or stagnate along separate paths.

In the isolation mode the organization becomes introverted, concerned with its own internal problems and operations at he expense of both innovation and customer focus. This mode characterized the British motor car and motor cycle industries during the late 1960s, and especially the 1970s. Limited product development was undertaken, and what was done was often tangential to market preferences. Indeed, British Leyland became notorious for technically innovative vehicles that sold poorly, often because of appalling reliability, a rather basic customer requirement. Surely the most primitive market feedback would have revealed this insight to management?

2.5.2 Follow

The market drives the technology in the Follow mode. The firm relies heavily on both formal or structured (using surveys) and informal or unstructured ("walking in the customer's shoes") market research to establish the parameters of products and services, and to drive their development. This can either be from scratch, in the case of new product development, or from an established position, where the product or service is refined. Examples of the former in the car industry are:

followed the former in the 1970's by loading their products with extras not normally available in other non-Japanese manufacturers' cars. Customers' expectations were raised, and they began to question why these extras were not available in the initial products of other manufacturers. As a result of these kinds of strategic moves, marketers learned the hard way that they needed increasingly to distinguish between so-called qualifying and determining attributes, for as competitors become better at fulfilling the important requirements of customers, sometimes the determinants of choice are the less important - but determining- attributes.

Examples of the shaping of prototypical preference strategy are Jeep in the USA and Land Rover in the UK, in defining the four wheel drive utility market. These manufacturers shaped what consumer psychologists call the customers' category prototypes, and disproportionately influenced the criteria against which customers evaluated other, later entrants to the market (Carpenter and Nakamoto, 1989). In subsequent studies, researchers have actually been able to demonstrate that even so-called 'irrelevant' attributes may influence choice, supporting the idea that a properly executed shaping strategy can be devastatingly effective (Carpenter, Glazer and Nakamoto, 1994). Historical evidence that may be adduced for this argument include order of entry studies (Urban, Carter, Gaskin and Mucha, 1986) and brand longevity data (Aaker, 1991).

The shaping strategy also manifests itself in two distinct forms: *defining* and *influencing* (although it might be argued that the latter is but a delimited version of the former). The *defining* strategy is one in which entrepreneurial imagination and action combine with often-serendipitous series of events, and lead to a product defining a market. For example, Chrysler in the early 1980's forged ahead with the original minivan concept, despite market research showing that people were strongly negative towards the vehicle. The Chrysler minivan went on to create and define the minivan market. Similarly, in the early 1990's Compaq gambled millions of dollars on PC network servers despite research indicating that the market would never abandon mainframes. The PC server has now replaced the mainframe in many markets, and Compaq remains the definitive server against which others are judged (e.g., Martin, 1995).

In the *influencing* mode, products influence market expectations and trends, but in and of themselves do not define the market, nor necessarily capture it. For example, Apple's Macintosh defined what most customers wanted in a personal computer - a user-friendly tool with a graphic interface that did not require technical computing skills. It did not go on to dominate the PC market. Freddie Laker's ill-fated airline venture did not delimit the air travel market. However it did drastically shape the expectations and perceptions of travelers concerning the price of trans-Atlantic travel, and opened the way for subsequent entrants. It was no accident that Virgin's Richard Branson wanted to name his first aircraft, "*Spirit of Sir Freddie*" (Brown, 1994). We suspect that the distinction we are making is in many cases only *ex post*, for *influencers* would often like to define. However, in some cases the *influencing* choice is undoubtedly *ex ante*, as witnessed in negotiations to attempt to influence new standards in consumer electronics or, as Kodak has just done, in the new Advantix film format for 35mm photography. An *influencer* does not have to dominate a new standard to benefit enormously, especially if the end-use market is elastic (e.g. Brandenburger and Nalebuff, 1996).

Lest we create the impression that all shaping strategies are good and necessarily productive, it should be pointed out that a great many fail (Quinn, 1986). Successful shaping requires the placing of two large bets, one on technology and the other on the market. Failure rates in developing new technology are notoriously under-estimated because of a tendency to sink without trace. Failure to shape, however, is equally common for a second reason; namely technological pioneers often have a poor understanding of market and customer learning processes. Much of the new research discussed above is based upon the benefits of being first in the mind of the buyer. However, the technological bias of many innovative companies leads them to believe that being the first to perfect, to produce or even to sell and distribute is enough to win the marketplace prize. By under-investing in marketing communications (by design or default) they unwittingly cede their position to a follower. The management consulting firm A. D. Little sees an ironic symmetry to this problem, as follows:

> 'Technologists in fast-moving consumer goods companies - archetypes of Marketing-dominated companies - tend to adopt a low profile and do what they are asked to do without much debate, so convinced are they that their companies, being market-oriented, must be Marketing-driven. The reverse is equally true: in

technology- or engineering-driven companies. marketers often tend to follow-and sometimes mimic-their colleagues in the technical departments (from which they themselves often come)' (Deschamps, 1994: 11-12).

2.5.4 Interact

In the interact mode, a true dialogue is established between the market and technology. In a sense a dialogue is present over time in any marketplace, but at any one time firms are often engaged in a monologue. The term dialogue is appropriate here because it uses the metaphor of speech to underpin the market-technology relationship, providing a spectrum ranging from "conversation" to "negotiation". The term conversation conjures up the image of a fairly genteel two-way flow of information, ideas offered, modified, and evolved. Negotiation sums up the harder image of a power play between products and markets, where there are trade-offs of values and features. Many industrial markets operate in the *negotiation-interact* mode - a prospective customer publishes a bid or tender and invites potential suppliers to submit their offers before moving toward the next step in the development of the product or service. In contrast, bespoke tailors have for years involved their customers in *conversational* dialogues concerning the product that they will in a very real sense "co-produce".

History provides us with a number of examples of the interaction mode. Many of the early automobile manufacturers at the upper end of the market, such as Bentley, Duesenberg, Alvis and Bugatti co-operated with independent coachbuilders to make cars to owners' specifications. Interestingly, Rolls Royce Cars seems to be moving once again in this direction as a way to distinguish themselves from other high quality car producers. It recently announced its return to the manufacture of the 'bespoke' automobile, promising that no two cars which left the factory would be the same - each car being exactly tailored to each individual customer's specification (Car, 1997a, The Times, 1997). Perhaps the best known recent example, however, is Boeing's successful inclusion of the representatives of eight of its most important customers as members of the 777 design team (Flight International, 1993).

Another perspective on the interact option is afforded by the developing emphasis on "relationship" marketing (Heide & John, 1990; Spekman and Salmond, 1992; Morgan and Hunt, 1994). As companies learn more about their customers' preferences subtle changes occur, as the emphasis moves from responsiveness in service alone to a broader interpretation. Indeed these ideas are reflected in such concepts as mass customization (Pine, 1993; Pine, Peppers & Rogers 1995), "segment of one" markets (Blattberg & Deighton, 1991), and "one-to-one" marketing strategies (Peppers and Rogers, 1993). Eventually the "market of one" will ultimately be matched by a "product of one": Levi Strauss allows customers to have their measurements taken, for a pair of customized jeans to be delivered a day or two later, styled, cut and sewn to the customer's precise requirements (McGarvey, 1995). Recent developments on the Internet, and particularly the World Wide Web, offer some ideal opportunities to expand the interaction mode: customers and manufacturers will be able to enter into a dialogue regarding the design of a product or service, its delivery and modes of payment. Indeed, Glazer suggests that the emergence of these "smart" markets will require the development of information-intensive strategies and " smart" products, "i.e. product and service offerings that adapt or respond to changes in their environment as they interact with consumers" (Glazer, 1997). The Firefly Network (www.firefly.com) creates virtual communities of users by getting them not only to give a lot of information about themselves, but also to do a lot of the work required to create this virtual community. Customers give information about their preferences regarding books, music and films. Firefly then builds a profile of the customer's likes, which is continually updated as the customer keeps on providing more information – usually in the form of ratings on scales. This information is then correlated with other users' interests and enjoyment profiles to recommend new music, books and films. Customers also give their opinions of the films, music and books that they have seen and this is then fed back to other users. This information is not only very valuable to the customer, but a major asset to the company itself, which vends it to film producers, record companies and book sellers. The customer is thus not only a co-creator of their own service and enjoyment, they also produce on behalf of Firefly a very valuable and salable information service.

2.6 Understanding strategic dynamics

Obviously there can be movement among the modes over time. For example, initially a product may be developed to meet a specific market need (follow), or it can define a market (shape). Over time a shaper might become a follower, lapse into isolation, or become truly interactive. There is a temptation to be normative about which mode to pursue - devout marketers might espouse a following strategy, and engineers and technologists a shaping strategy. Even an isolation strategy might have adherents. After careful thought, however, interaction would probably get the popular vote. Unfortunately, reality is seldom that simple. Dialogue and interaction may be expensive at best, and irrelevant at worst. Further, though they may reduce risk, we can also argue they may be less likely to consistently produce either the breakthrough product or service that characterizes the successful shaper or the devotion to true customer satisfaction that good followers are able to deliver. In understanding the dynamics of changes of modes among the archetypes, however, it is first worthwhile to review some of the factors that may inhibit or foster the change process.

It has long been recognized that organizations are in a continual state of flux (Hofer and Davoust, 1977; Hall, 1980; Miller and Friesen, 1983; Morris, Davis and Allen, 1991). Organizations change modes over time, and can learn valuable lessons from each mode. The potentially maligned isolation mode can be a period in which a company turns its attentions inward, and becomes introverted. This can be highly productive, in for examples, phase of reflection, re-assessment and re-organization. Thus, a state is neither good nor bad in and of itself, but rather how that state is used. Among the most important factors which influence a change of state are:

- *Inertial Factors*: Firms typically establish and embed approaches to technology and market deeply in their cultures, and this inertia renders them unlikely to change unless presented with a threat to their survival. Even where survival is evidently at risk, strong constituencies as diverse labor unions and top management may obdurately resist change.
- *Environmental Factors*: It can be argued that the efficacy of a particular mode is partly contingent upon the characteristics of a specific business environment. In a very stable environment, an isolate strategy might be effective and economical. In contrast, in an environment of complex and rapidly evolving needs and wants, combined with a variety of technological alternatives, an interactionist approach might appear more appropriate.
- *Competitive Factors:* Cycles of near–equilibrium and dis-equilibrium are the life-blood of competitive markets, creating the waves of discontinuity which bring ever-greater value to customers in such markets (Schumpeter, 1939; D'Aveni, 1994). In this view, stability is but a temporary illusion, and the market-technology dialogue will be ongoing.

2.6.1 Understanding the Implications of Changes of Mode

As noted earlier, the typical mode change will be exogenously driven. In order to retain strategic mastery, however, firms must acquire the ability to pro-actively assert control over this process. In other words the emergent is better, planned. In order to do this though, we must understand the implications of each mode and the requirements for successful changes of mode. Possessing this knowledge may be a necessary, but probably not sufficient, condition to ensure successful change, such are the forces of stasis which must typically be overcome (Hannan and Freeman, 1984). Figure 2.4 shows a comparison of the modes of interaction, their characteristics and four crucial competencies associated with each archetype we have discussed. From a comparison of the cells in the figure, it is evident that very substantial change is necessary to accommodate movement from one mode to another. This explains why large external shocks are typically necessary to bring about shifts. However, empirical research has established that, in general, planned re-orientations are more successful than crisis-driven change (Virany, Tushman and Romanelli, 1992; Tushman and O'Reilly, 1996).

Figure 2.4: Modes of Interaction and Crucial Competencies for Different Archetypes

Archetype: **Mode**	**Isolate**	**Follow**	**Shape**	**Interact**
Inter-organizational Focus	The organization focuses on itself. It is "organocentric"	Each other: Follow "like competitors" through mutual benchmarking	The business environment	The business environment and self
Interaction with Customer	Low and primarily transactional	High and following	High and directive	High and reciprocal
Product Development	Minimal/tangential to customer needs and wants	Incremental (Kaizen)	Technology-driven/ discontinuous	Co-development
Market Strategy	Maintenance	Responsive	Assertive	Collaborative
Organizational Competencies / Culture	Inwardly Focused /Bureaucracy	Customer Service/ Developmental R&D	Technology-Driven/Assertive Marketing	Holographic Interacting Ad-hocracy

2.6.2 Changes of Mode

When we consider that there are four modes in Figure 2, it is evident that there are 12 possible mode transitions that may occur. We do not intend to explore all of these, but rather to illustrate the transitions that may occur through examining some well-known case examples.

Boeing. The recent history of the Boeing company provides an excellent example of mode transition. In the times prior to deregulation, Boeing was a *shaper*. The major US airlines did not possess significant marketing capability, and Boeing stepped into the breach by acting as an ancillary marketing department for its customers, analyzing future patterns of demand and future equipment needs. As the capital costs of new airframes rose, however, evidence of movement toward *interact* began to appear (Beeby, 1983). The 747 relied on a high degree of collaboration with PanAm, but the most dramatic example was provided by the 777, for which eight leading airlines actually provided employees to participate in Boeing's design teams on an ongoing basis (cf. Quinn, 1992, p.180). With the decision to drop the development of a so-called "Super-jumbo" of 600-800 seats, however, it appears that Boeing has settled into a *follow* mode. Only British Airways and Singapore Airlines had expressed strong interest in the proposal, and Boeing decided to follow the rest of the airlines in saying no to the project, at least for the time being.

AOL. Initially a *shaper*, America Online dominated the on-line provision of Internet services, shaping customer expectations of what an Internet provider should be. Others emulated AOL's strategy, with varying degrees of success. However, complacency overtook AOL, its customer base learned and evolved in terms of expectations faster then the company realized. From a shaper position, AOL slipped back into relative *isolation*. AOL became increasingly out of touch with customer expectations, focusing rather on the internal objective of growth. To this end in December 1996 AOL offered an unlimited-use fee structure. It came as quite a shock when customers started to rebel at the poor response time the AOL servers were providing. Initial platitudes soon turned into panic. Indeed AOL is now primarily in a *follow* mode with its customers dictating their requirements (Economist, 1997).

Microsoft. Initially in *isolate* mode, Microsoft derided the Internet, ignored the market, and did little in the way of product development in the area of a Web browser. However, seeing the exponential growth of the World Wide Web, and the explosive success of Netscape, the *shaper* of the browser software market, Microsoft was spurred into action. In a well documented *volt face*, Microsoft moved from *isolate* to *follower.* It developed its Explorer browser software by imitating virtually every feature of Netscape's seminal and defining Navigator product. Whether aggressive marketing combined with giving the product away free to anyone and everyone is enough to overtake the *shaper* Netscape remains to be seen (e.g. Economist, 1996) particularly in view of recent customer reports on Explorer, which allege serious security defects.

2.7 Conclusion

The mode transitions discussed above have much in common with Schotter's (1981) perspective on economic institutions, namely that the institution's development can be inferred from the existence of an evolutionary problem, for every evolutionary economic problem requires a social institution to solve it. The history of marketing specifically (cf. Alderson, 1957), and of organizations generally (cf. Chandler, 1962; 1977), is consistent with this perspective. Vertically integrated functional organizations (such as Ford at the time of the Model T) dominated the early years of this century, when relatively stable market environments characterized by low customer purchasing power and simple customer preferences caused the focus to be on production. Following this, organizations became multi-divisional (e.g. GM in the Sloan years), in an attempt to be both product and market oriented. The environment of increased spending power and more sophisticated tastes both permitted and necessitated this. As this power and sophistication intensified, however, the multi-divisional organizations were in turn supplanted by some form of matrix organization, often attempting to align marketing more closely with science and engineering (Bartlett & Ghoshal, 1990). In the 1980s, matrices gave way to networks (cf. Powell, 1990; Iacobucci, 1996), as it became apparent that many effective organizations, such as those from Japan and Korea, owed their success to factors outside the firm.

Further, Duncan (1976) highlights a basic contradiction in organizational structures best suited to innovation versus efficient implementation. His proposal is that organizations should change shape in their transition from innovation to implementation. Analogously, in our model, changing from shaper mode to follower mode, might mean becoming far less organic, and more mechanistic. Indeed, the interacting firm might require the most radical organizational form of all - one which is constantly changing shape, structure, processes, and even objectives. Hedberg, Nystrom and Starbuck (1976) describe, and Huber (1984) alludes to, the "experimenting" organization, which is in a constant state of self-redesign, characterized by flexibility and adaptability; while others have referred to the effectiveness of Adhocracies (Duncan, 1976). A recent article in The Economist illustrates the phenomenon:

> 'To an unusual degree Silicon Valley's economy relies on what Joseph Schumpeter, an Austrian economist, called "creative destruction".....the basic idea is (that) old companies die, and new ones emerge, allowing capital, ideas and people to be re-allocated' (Economist, 1997, p. S-7).

It was never our intent to present an apostasy of the marketing concept. Rather, we intended to demonstrate that market orientation is not the equivalent of implementing the marketing concept as originally conceived by Drucker (1954), and that there is more than one mode of achieving business success. Market orientation focuses on the serving, or the keeping of customers (as a perusal of the items in the various instruments proposed to measure it [cf. Kohli, Jaworski and Kumar, 1993] would confirm). To fully embody the marketing concept as originally espoused by Drucker and others in the 1950s, there is also a need to *create* customers, through innovation and interaction.

In summary, in this dissertation we have attempted to sort signal from noise on two of the most widely promoted theses in management today: the need for market focus/customer orientation and the requirement for better management of technology/innovation. In doing so it is hoped managers may use the insights thus generated to make better and conscious decisions about their companies' future strategy.

In this chapter a central tension in management has been reviewed - the tension between marketing and innovation, tracing its roots back to one of the architects of the post-war business paradigm - Peter Drucker. The recent literature on market orientation was reviewed and the contrasting views of serving vs. creating a customer, of marketing vs. innovation orientation explicated. From this discussion, a model that provides a more inclusive paradigm was delineated. The resulting archetypes and their inter-relationships were discussed, and implications for the practitioner developed. The chapter concluded by exploring the dynamics of the change process for several well-known companies, based on the insights generated by the model. In the next chapter hypotheses will be developed and an instrument proposed for testing.

CHAPTER 3

PROBLEM FORMULATION AND HYPOTHESES

3.0 Introduction

This chapter focuses on a statement of the problem, and the subsequent formulation of the hypotheses to be tested in this study. The problem and hypotheses are [and will be] based in the literature, and a rationale for each will be given. Chapter 1 introduced the study and clarified its broad objectives. Key concepts, such as the marketing concept, market orientation, customer focus, technology orientation and strategic archetype have been clarified. Chapter 2 provided the theoretical foundations from the literature for the development of the hypotheses to be tested in the study, which is grounded in contingency theory concerning four areas, namely market orientation, competitive rationality; technology focus, and, new product development. In Chapter 2 the applicable literature was reviewed, with a focus on the areas of the marketing concept, market orientation and the customer-technology dichotomy. The preceding chapters form the basis for problem formulation and the subsequent generation of hypotheses, which is the objective of this chapter.

3.1. The TOCO Scale

Berthon, Hulbert and Pitt (1998) report on their development of TOCO: The Technology Orientation-Customer Orientation Scale, which can be used to identify and assess the strategic focus of an organization as described in Chapter 2. Simply, TOCO is a means of identifying whether a firm is an isolate, a follower, a shaper or an interact. The instrument uses 24 items, grouped on 6 broad dimensions to assess the orientation. These six dimensions consider how the organization views:

1. Customers
2. Products and Services
3. The Business Environment
4. Competitors
5. Itself
6. Employees

There are two versions of the TOCO scale. One uses 24 Likert-type items anchored on *I disagree strongly* through *I agree strongly*, to tap into the six dimensions. The other is a "forced-choice" scale, which requires the respondent to rank his or her organization on each of the six dimensions from "most like my organization" to "least like my organization". Berthon, Hulbert and Pitt (1998) developed two versions of the scale because, while the Likert-type version is more effective for statistical assessment, managers find the forced-choice version of the questionnaire more comprehensive and easy to interpret. The forced choice version of the instrument is illustrated in exhibit 3.1, and the Likert-type version in exhibit 3.2.

In developing the scale Berthon, Hulbert and Pitt (1998) have focused on the ways in which a firm could consider customers, products and services, its competitors, the business environment, its employees, and of course, itself. They report to have conducted considerable management development and in-class teaching using the forced choice version of the scale, where they have also found it to be of considerable benefit as a teaching and consulting tool.

The development of the instrument was largely deductive, based on the conceptual framework outlined in Berthon, Hulbert and Pitt (1996; 1998). However, these authors also reviewed established instruments in the field of market orientation (e.g. Narver and Slater, 1990; and (Kohli and Jaworski, 1993). Following Narver and Slater (1990) external focus subsumed customers, competitors and the broader external environment. In addition to these three external characteristics, however, their conceptual model required that they examine and measure elements of the internal operation of the company. Since their major concern was with innovation, they developed an item dealing with innovative products and services. They were also interested in the degree of organocentrism exhibited, so another section focused on the organization itself. Finally, given the emphasis placed on the importance of employees by practitioners (Sheff, 1995) and academics, particularly those studying customer service (Parasuraman and Berry, 1991), they incorporated this in the questionnaire also. For each of these six elements, three internal and three external, items were constructed which aligned with the orientations suggested by the four cells in the model depicted in the previous chapter.

Exhibit 3.1 The TOCO Scale – Forced Choice Version

Instructions: Think about the organization you work for - how it views its customers, its competitors, how it thinks about technology in the form of products and services, its perceptions of the business environment in which it operates, its employees, and of course, itself. Then complete the short questionnaire below. Read each of the four descriptions of an organization, A, B, C and D and then mark a "1" next to the description that you think best fits your organization, a "2" next to the description that fits it next best, and so on, until you place a "4" next to the description that least describes your organization. In many cases of course, you may find the descriptions quite similar, so read them carefully. Also, there may be instances where you want to say, "It all depends". Don't worry too much about this - there are no "right" or "wrong" answers, so simply record your first impression.

Let's use a simple example to illustrate:

Suppose a statement read as follows, with four descriptions of an organization:

Our organization feels as follows about "casual dress", or "dressing down:

A. It is totally unacceptable ____

B. It is left to the discretion and good sense of the individual ____

C. It is acceptable on Fridays ____

D. It is encouraged at all times ____

Obviously there is overlap between some of the descriptions in the example, but let's assume you know or at least think that there is a "Casual on Fridays" arrangement in the organization, and that while it wasn't necessarily encouraged at all times, it was at least left up to the good sense and discretion of individuals. You might also be certain that at least there wasn't a rule that casual dressing was totally unacceptable. You would place a "1" next to description C, and then perhaps a "2" next to description B, and a "3" next to description D. You would also place a "4" next to description A, since that was U like your organization.

Now complete the following:

Descriptions of Organizations

1. *Our organization views customers as:*

A. Necessary sources of revenue for the firm _____

B. The primary reason for the firm's existence _____

C. People who will respond positively to innovative products and services _____

D. Co-partners in the development of customized products and services _____

2. *Our organization views innovative products and services as:*

A. A means to extract revenue from customers _____

B. A means of responding to the needs and wants of customers _____

C. The primary reason for the firm's existence _____

D. As something which is co-developed with customers _____

3. *Our organization views the business environment (factors such as the political and legal situation, the economy, and socio-cultural change) as:*

A. Of primary importance, because of its impact on the firm _____

B. Of primary importance, because of its impact on customers _____

C. Of primary importance, because of its impact on innovative products and services _____

D. Of primary importance, because of its impact on the interaction between customers and innovative products and services _____

4. *Our organization views competitors as:*

A. Rivals who attempt to take away our firm's market share and financial rewards ____

B. Rivals who attempt to satisfy customers needs and wants better than we do ____

C. Rivals who attempt to develop innovative products and services, and shape wants better than we do ____

D. Rivals who attempt to engage customers in interaction with innovative products and services better than we do ____

5. *Our organization views itself as:*

A. A vehicle for the creation of shareholder and employee wealth ____

B. A vehicle for the creation of satisfied customers ____

C. A vehicle for the creation of innovative products and services ____

D. A vehicle for the creation of interactions between customers and innovative products and services ____

6. *Our organization views employees as:*

A. Dedicated to the service of the firm ____

B. Dedicated to the service of the customer ____

C. Dedicated to the development of innovative products and services ____

D. Dedicated to the establishment of interaction between customers and innovative products and services ____

Instructions for Scoring

Once you have completed your impressions of all the situations, add up all your scores for "A" descriptions, and place them in the box under "Type A" firms below, then do the same for all the "B" descriptions, then the "C", and so on.

Type "A" Firm	**Type "B" Firm**	**Type "C" Firm**	**Type "D" Firm**

In order to check your calculations and scoring, you might want to remember that the largest number that could be in a box above is 24, and the smallest, 6. Also, once you have completed the four boxes, the numbers in them must add up to a total of 60.

How to interpret your scores

According to your impressions, you believe your organization is most like whichever firm type you have the lowest number in the box of, and least like whichever box has the highest number in. So, for example, if you had a lowest score of 9 in the type "B" firm, your impression is that your organization is most like a type "B" firm, and least, perhaps, like a type "C" firm, where your highest score may have been 23. Alternatively, you may find that your two lowest scores are actually quite close together, and even identical in some instances. This would mean that in your opinion, that while your firm is mostly Type "B", with a score of 10, it is often like a type "D", with a score of 12, and frequently acts in that way.

Exhibit 3.2 The TOCO Scale – Likert-type Version

Instructions: Think about the organization you work for - how it views its customers, its competitors, how it thinks about technology in the form of products and services, its perceptions of the business environment in which it operates, its employees, and of course, itself. Then complete the short questionnaire below. Read each of the four descriptions of an organization, A, B, C and D and circle the number on the scale that best describes your view of your organization. For example, if you believe that a description fits your organization perfectly, you should circle the number 7 (I agree strongly). If, on the other hand, you believe that the statement does not in any way describe your organization, you should circle the number 1 (I disagree strongly). In many cases of course, you may find the descriptions quite similar, so read them carefully. Also, there may be instances where you want to say, "It all depends". Don't worry too much about this - there are no "right" or "wrong" answers, so simply record your first impression.

Now complete the following:

Our organization views customers as:	
A. Necessary sources of revenue for the firm	1 2 3 4 5 6 7 I disagree strongly … I agree strongly
B. The primary reason for the firm's existence	1 2 3 4 5 6 7 I disagree strongly … I agree strongly
C. People who will respond positively to innovative products and services	1 2 3 4 5 6 7 I disagree strongly … I agree strongly
D. Co-partners in the development of customized products and services	1 2 3 4 5 6 7 I disagree strongly … I agree strongly
Our organization views innovative products and services as:	
A. A means to extract revenue from customers	1 2 3 4 5 6 7 I disagree strongly … I agree strongly
B. A means of responding to the needs and wants of customers	1 2 3 4 5 6 7 I disagree strongly … I agree strongly
C. The primary reason for the firm's existence	1 2 3 4 5 6 7 I disagree strongly … I agree strongly

D. As something which is co-developed with customers	1 2 3 4 5 6 7 I disagree strongly I agree strongly
Our organization views the business environment (factors such as the political and legal situation, the economy, & socio-cultural change) as:	
A. Of primary importance, because of its impact on the firm	1 2 3 4 5 6 7 I disagree strongly I agree strongly
B. Of primary importance, because of its impact on customers	1 2 3 4 5 6 7 I disagree strongly I agree strongly
C. Of primary importance, because of its impact on innovative products and services	1 2 3 4 5 6 7 I disagree strongly I agree strongly
D. Of primary importance, because of its impact on the interaction between customers and innovative products and services	1 2 3 4 5 6 7 I disagree strongly I agree strongly
Our organization views competitors as:	
A. Rivals who attempt to take away our firm's market share and financial rewards	1 2 3 4 5 6 7 I disagree strongly I agree strongly
B. Rivals who attempt to satisfy customers needs and wants better than we do	1 2 3 4 5 6 7 I disagree strongly I agree strongly
C. Rivals who attempt to develop innovative products and services, and shape wants better than we do	1 2 3 4 5 6 7 I disagree strongly I agree strongly
D. Rivals who attempt to engage customers in interaction with innovative products and services better than we do	1 2 3 4 5 6 7 I disagree strongly I agree strongly

75

Our organization views itself as:	
A. A vehicle for the creation of shareholder and employee wealth	1 2 3 4 5 6 7 I disagree strongly I agree strongly
B. A vehicle for the creation of satisfied customers	1 2 3 4 5 6 7 I disagree strongly I agree strongly
C. A vehicle for the creation of innovative products and services	1 2 3 4 5 6 7 I disagree strongly I agree strongly
D. A vehicle for the creation of interactions between customers and innovative products and services	1 2 3 4 5 6 7 I disagree strongly I agree strongly
Our organization views employees as:	
A. Dedicated to the service of the firm	1 2 3 4 5 6 7 I disagree strongly I agree strongly
B. Dedicated to the service of the customer	1 2 3 4 5 6 7 I disagree strongly I agree strongly
C. Dedicated to the development of innovative products and services	1 2 3 4 5 6 7 I disagree strongly I agree strongly
D. Dedicated to the establishment of interaction between customers and innovative products and services	1 2 3 4 5 6 7 I disagree strongly I agree strongly

Instructions for Scoring: Once you have completed your impressions of all the situations, add up all your scores for "A" descriptions, and place them in the box under "Type A" firms below, then do the same for all the "B" descriptions, then the "C", and so on. In order to check your calculations and scoring, you might want to remember that the largest number that could be in a box above is 42, and the smallest, 6.

Type "A" Firm	Type "B" Firm	Type "C" Firm	Type "D" Firm

How to interpret your scores: According to your impressions, you believe your organization is most like whichever firm type you have scored the highest number for, and least like whichever box has the lowest number. So, for example, if you had a lowest score of 9 in the type "B" firm, your impression is that your organization is least like a type "B" firm, and most, perhaps, like a type "C" firm, where your highest score may have been 23. Alternatively, you may find that your two lowest scores are actually quite close together, and even identical in some instances. This would mean that in your opinion, that while your firm is mostly Type "B", with a score of 20, it is often like a type "D", with a score of 22, and frequently acts in that way.

3.1 Pre-testing

Berthon, Hulbert and Pitt (1998) state that the questionnaire was pre-tested with mid-level executives attending an executive program. The pre-tests led to minor modifications of instructions to respondents and to the scaling of the items, but no changes were made to the items themselves. Participants in the pre-tests were given a self-diagnostic that enabled them to interpret their scores.

3.2. Assumptions and considerations

The development of the study up to this point, should, to a major extent, have answered the following questions, suggested as some to be addressed by Dillon, Madden and Firtle [1987]. *What has been learned of the situation*? The situation has been introduced, and grounded in appropriate theory. Furthermore, relevant literature regarding the situation has been reviewed and evaluated. *What assumptions are being used*? The major assumptions of the study are, first, that the TOCO instrument [Parasuraman, Zeithaml and Berry 1988; 1991] is an appropriate instrument for the assessment of a firm's strategic focus. Second, that it is possible to assess strategic focus under various conditions and circumstances. *Are the assumptions reasonable*? The first assumption is reasonable in that the instrument under examination has followed a fairly rigourous process of development, as reported at a premier academic conference; is currently being used in research and in teaching. The second assumption has not received the same degree of scrutiny - unless this study shows otherwise it is therefore reasonable to assume that it is possible to conduct sstrategic focus research in a variety of setting using different versions of the TOCO instrument. *How precise does the information need to be*? Obviously, a study of this nature requires a high degree of rigour in approach, data-gathering, data analysis, and presentation. However, it should be borne in mind that the nature of the research does not really permit, or warrant, perfectly precise measurement. The focus of analysis is and *perceptions* of managers, and the ultimate purpose is managerial insight. While analysis to six decimal places is perhaps appropriate in the physical sciences, it is possible, but not necessarily relevant, here.

3.3 Formulation of Hypotheses

There are three broad hypotheses to be tested in this study, which revolve around the use of the TOCO scale in its two versions.

> ***H_{01}:*** *That TOCO is a reliable instrument to assess the technological orientation-customer orientation of a firm.*
>
> ***H_{02}:*** *That TOCO exhibits a stable factor structure with four distinct and clear archetypes*
>
> ***H_{03}:*** *That TOCO will possess convergent validity by being strongly related to a separate and distinct assessment of the technological orientation-customer orientation of a firm*

Leading from hypotheses 0_1 through 0_3 is the overall consideration and general hypothesis that the TOCO scale is reliable and valid for use in assessing the technological orientation-customer orientation of a firm. Obviously this hypothesis is not as technically testable as are the other three, but is, rather, dependent on acceptance or rejection of the other hypotheses for its own acceptance or rejection.

3.4 Summary

In this chapter problem formulation in general, and more specifically, the generation of hypotheses, have been addressed. These hypotheses have been developed from the literature in Chapter 2. They cover specifically, aspects of the reliability; and, validity of the TOCO instrument.

CHAPTER 4

METHODOLOGY OF THE STUDY

4.0 Introduction

In this chapter, the methodology employed in assessing technology orientation-customer orientation in two samples of managers in order to test the reliability and validity of the TOCO scale is described. The two samples will be outlined and the use of TOCO in each case will be explicated.

4.1 The Research Context

South Africa provides an especially relevant context within which to study customer orientation – technology orientation. The past few years have witnessed rapid and unprecedented change, which has directly impacted on and affected all commercial enterprises. The removal of international sanctions has forced established firms to move from an internal to an external focus. Increasingly, South African firms are being exposed to global competition, rapid technological change, and a more powerful labor movement. Meanwhile, protected industries are being deregulated. Furthermore, restructuring of major companies is occurring and different economic alliances are being formed. Entrepreneurs are also facing changing customer profiles, as the black population asserts its spending power. Thus the entrepreneur operates in an environment filled with inconsistent features, uncertainty, contradictions and paradoxes.

4.1 Sampling methods

Two samples were used in this research – one to test the "forced choice" version of the TOCO scale, and the other to test the Likert-type version. These are now described in turn.

4.1.1. Sample A

The sample for the Likert-type version of TOCO was constructed as follows. A cover letter and a questionnaire was faxed to the marketing director of 200 firms in South Africa, listed on a major commercial database which was purchased specifically for this research. The cover letter requested that the marketing director take a few minutes to complete the TOCO scale as illustrated in Exhibit 3.2. Pre-notification calls were placed approximately two days before faxing, and follow up telephone calls were placed approximately four days after faxing the company. To facilitate a response, the participants were promised an executive summary of the results. Sixty-one marketing directors responded, indicating a response rate of 30.5%.

4.1.2. Sample B

The sample for the forced choice version of TOCO was constructed as follows. A cover letter and a questionnaire was faxed to the marketing director of 200 different firms, not surveyed in Sample A above, in South Africa, listed on a major commercial database which was purchased specifically for this research. The cover letter requested that the marketing director take a few minutes to complete the TOCO scale as illustrated in Exhibit 3.1. Pre-notification calls were placed approximately two days before faxing, and follow up telephone calls were placed approximately four days after faxing the company. To facilitate a response, the participants were promised an executive summary of the results. Sixty-four marketing directors responded, indicating a response rate of 32.0%.

4.2 Questionnaire Design

Two separate research instruments were utilised, both as mail/fax questionnaires. One was a Likert-type version of TOCO, as shown in Exhibit 3.2, and the other the forced choice version of TOCO as shown in Exhibit 3.1. The instructions for the completion of the questionnaires were used verbatim as they appear in exhibits 3.1 and 3.2. The questionnaires were checked for consistency and for the appropriateness of their use under South African conditions. A letter describing the purpose of the study, and soliciting the respondent's cooperation was attached to the front of the questionnaire.

4.3 Procedure

In each case the marketing director of the firm was notified by means of a telephone call that a questionnaire would be faxed to them in the evening (when fax machines were unlikely to be busy or engaged. Over the course of three evenings the 200 faxes were sent off. All were sent successfully although there was a need to send some more than once due to engaged signals and errors.

The respondent was given the option of either mailing or faxing the completed questionnaire back. Around 79% of the respondents in sample A (48), and around 80% of the respondents in sample B (50) chose to fax the questionnaire back, while 21% and 20% chose to mail the questionnaire back, respectively. In the case of sample A 40 respondents had replied within four days, and the follow up telephone calls resulted in a further 8 responses. In the case of sample B 46 respondents had replied within four days, and the follow up telephone calls resulted in a further 4 responses.

In the case of sample A 49 respondents requested that they be sent the executive summary of the results, while in the case of sample B 53 respondents requested that they be sent the executive summary of the results.

4.4 Data Entry

The questionnaires were checked for correctness and edited. All questionnaires returned were useable and complete, possibly due to the fact that the questionnaire is relatively short and simple. The data was then entered into a spreadsheet (Excel), checked for entry errors, and then transferred to a statistical analysis package (SPSS for Windows 95) for further analysis.

4.5 Summary

This chapter has described the methodology employed in the study. Both the sampling and questionnaire design aspects have been explicated, and the procedures for administration outlined. The response rates are also described. In the next chapter the results of the statistical analysis are reported and discussed.

CHAPTER 5

RESULTS

5.0 Introduction

The test application was conducted with a convenience sample, comprising sixty-one executives attending various executive management courses. All were experienced executives, with sufficient knowledge to assess their employer's strategic orientation and there were multiple respondents from each organization represented. Two of the programs were single-company gatherings and a further two consortium programs. Of the single company programs, the first was a high-tech European electronic component manufacturer, and the sample consisted of mid-level executives attending a company-sponsored planning workshop. The second individual company was also a European component manufacturer, though not high-tech, and the small group of respondents consisted of the company's entire senior management team with the exception of the CEO. The consortium group consisted of individuals drawn from an American automobile producer, a food company and a quasi-governmental organization.

5.1 Reliability

Cronbach alphas ranged from .81 to .89, suggesting acceptable reliability was achieved. The competitive measures seemed to be the most problematic for in three of four instances the alphas would have increased by the greatest amount with the removal of the competitive items. The results of the reliability analysis are included Table 1.

Table 1: Scale Reliability Analysis

Isolate Scale

ISOLATE	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
A1	24.3443	39.6962	.6211	.7744
A2	25.0820	40.6098	.6630	.7634
A3	24.2295	47.5464	.4732	.8044
A4	24.2623	42.4301	.6560	.7667
A5	24.5738	43.9153	.5154	.7976
A6	24.5574	46.0508	.5341	.7930

N of Cases = 61.0 N of Items = 6 Alpha = .8134

Follow Scale

FOLLOW	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
B1	24.5902	35.5459	.6967	.8351

B2	24.4262	37.4486	.7407	.8264
B3	24.7705	37.9131	.7033	.8330
B4	24.8689	41.2492	.4645	.8765
B5	24.5902	38.5459	.7858	.8220
B6	24.7049	40.6115	.6064	.8501

N of Cases = 61.0 N of Items = 6 Alpha = .8640

Shape Scale

SHAPE	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
C1	22.4098	40.2459	.6492	.8424
C2	23.0492	38.8475	.6418	.8437
C3	22.7377	40.1967	.5688	.8570
C4	22.4754	40.9202	.5241	.8651
C5	22.2787	38.4710	.7987	.8182
C6	22.5410	36.1191	.7954	.8143

N of Cases = 61.0 N of Items = 6 Alpha = .8637

Interact Scale

INTERACT	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
D1	22.2459	43.7552	.6762	.8817
D2	22.5246	43.2536	.6887	.8798
D3	22.5410	40.1191	.7390	.8727

D4	22.4754	45.0202	.6210	.8896	
D5	22.4754	41.7536	.8198	.8605	
D6	22.9016	40.9568	.7630	.8681	
N of Cases =	61.0		N of Items = 6	Alpha =	.8942

5.2 Construct Validity

Next, the data were subjected to a factor analysis. Because of the construction of the conceptual model, we expected that the factors may be intercorrelated to some degree. However the oblique rotation failed to converge, and the results in Table 2 (below) are a varimax solution with orthogonal rotation. The loadings shown in the table provide very fairly strong, if preliminary, support for the archetypes developed in this dissertation. Eighteen of twenty-four of the highest factor loadings occurred on the predicted archetype. The customer items seem to perform the best in loading as predicted, and the competitive items, the worst. These finding are mirrored in the Cronbach alpha results.

Factor one, which explained twenty-five percent of total variance, corresponds to our follower archetype, and suggests the conceptual clarity of the neo-classical interpretation of the marketing concept we discussed earlier and embedded implicitly in most measures of market orientation. Perhaps more encouraging to those who argue the case for innovation (Drucker, 1954; McKitterick, 1957; Webster 1988), however, is the emergence of "shaper" as the second factor, accounting for almost eighteen percent of the variance. Interact is also strong, accounting for almost seventeen percent of the variance, while isolate weighs in at a little over eight percent of variance explained. The fifth factor is difficult to interpret, but appears to represent a financial market orientation, with strong emphasis on externalities.

Table 2: Results of Factor Analysis

Eigenvalues

Factors and Eigenvalues

Factor	Eigenvalue	Pct of Var	Cum Pct
1	6.10084	25.4	25.4
2	4.21623	17.6	43.0
3	3.97660	16.6	59.6
4	1.99574	8.3	67.9
5	1.47158	6.1	74.0
6	.97196	4.0	78.1

Rotated Factor Matrix

Rotated Factor Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A1	.06748	.07267	-.11553	.81347	.06903
B1	.73859	-.17996	.00908	.20007	.20409
C1	.00215	.84810	-.04015	.13473	-.07193
D1	.34038	.23277	.54293	-.28180	-.18884
A2	-.03607	.02293	-.05574	.73313	.24836
B2	.81396	-.04255	.08282	.06309	.18958
C2	-.04155	.80366	-.15117	.04977	.16672
D2	.55630	.37319	.30485	-.32734	-.30287
A3	.25478	-.03752	-.07211	.33415	.72719
B3	.68264	-.20866	.26299	.00177	.43632
C3	-.10929	.53082	.21147	-.20699	.65491
D3	.40824	.24581	.56881	-.41495	.28860
A4	.02277	.08430	.13374	.88912	-.00595
B4	.34720	-.29074	.65449	.26362	-.02191
C4	-.15703	.40736	.68647	.32775	.12451
D4	.16384	.03202	.88889	-.11159	.02953
A5	.27348	.14161	.05211	.42005	.52226

B5	.77772	-.16521	.33107	.12742	.10676
C5	-.18495	.72932	.42867	.10707	.20556
D5	.47962	.24796	.59562	-.37022	.09135
A6	.26202	.44941	-.47660	.54459	-.00695
B6	.84518	.04625	-.01536	-.07506	-.18353
C6	-.12996	.86425	.23421	.04583	-.03343
D6	.44527	.52288	.38495	-.36405	-.24903

5.3 Convergent Validity

Test of convergent validity was performed as follows. Scores from TOCO were used to calculate an overall dominant archetype for each company. Simply, the highest score on each of the archetypes was taken to indicate an organizations dominant type. These overall type rating was then compared with an independent assessment of each company's overall mode. Below appear the results of this procedure in a cross-tabulation.

As can be seen by inspection of the tables and from the concomitant Chi squared figure and associated statistic, there is a high degree of correspondence between the TOCO rating and the independent archetype rating.

The tables present additional interesting information. For example the frequency of occurrence of the four archetypes varies widely. The Isolate appears to be the most common type, followed by the Follow type, the Interact and finally the Shape.

Table 3: Cross-Tabulation and Chi Squared Analysis

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
OVERALL * TYPE	72	98.6%	1	1.4%	73	100.0%

OVERALL * TYPE Crosstabulation

Count

		TYPE				Total
		1.00	2.00	3.00	4.00	
OVERALL	1.00	23	2			25
	2.00	3	21			24
	3.00	4		2	1	7
	4.00	3	6		7	16
Total		33	29	2	8	72

Chi-Square Tests

	Value	df	Asymp. Sig. (2-tailed)
Pearson Chi-Square	82.224[a]	9	.000
Likelihood Ratio	74.933	9	.000
Linear-by-Linear Association	27.360	1	.000
N of Valid Cases	72		

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .19.

5.4 Revisiting the Hypotheses

Three broad hypotheses, which revolve around the use of the TOCO scale, were tested in this study:

> ***H_{01}:*** *That TOCO is a reliable instrument to assess the technological orientation-customer orientation of a firm.*
>
> ***H_{02}:*** *That TOCO exhibits a stable factor structure with four distinct and clear archetypes*
>
> ***H_{03}:*** *That TOCO will possess convergent validity by being strongly related to a separate and distinct assessment of the technological orientation-customer orientation of a firm*

From the above analysis, we can accept that TOCO is a reliable instrument, with a clear factor structure of four archetypes. Moreover in being strongly related to an independent assessment of firm orientation. Consequently all three of the above hypotheses can be accepted.

CHAPTER 6

DISCUSSION, SUMMARY AND CONCLUSIONS

6.1 Introduction

In this dissertation we have addressed the issue of market and technological orientations. It is suggested that the followership interpretations which seem to predominate in some contemporary interpretations of the marketing concept, not only fail to do justice to the progenitors of the modern marketing concept, but also may lead to competitive vulnerability in the rapidly changing and turbulent competitive environments. As such contexts are likely to characterize the twenty-first century this is an issue of concern. Based on a careful reading of the traditional literature on the marketing concept, and more recent theoretical and empirical work on both market orientation and innovation, we developed a fourfold conceptual model suggesting the existence of four archetypal orientations within a broader framework subsuming market and technology aspects.

We operationalized measures of these archetypes in a scale labeled TOCO and performed preliminary empirical tests aimed at assessing the scales reliability and validity. Initial results were encouraging, supporting the underlying notion that the issue of strategic orientation is much broader than simply the presence or absence of a market orientation.

Unlike many attempts at depicting orientation typologies (See, for example, Keith, 1960; Miles and Snow, 1978) we have focused explicitly on the role of technology and innovation, issues central to policy debates in firms and governments. While there have been empirical studies demonstrating some of the characteristics of innovative companies (Capon, Farley, Lehmann and Hulbert, 1992), to our knowledge there has been no previous attempt to incorporate both the technology and market dimensions within a broader conceptual schema such as that employed in this study. Clearly much work remains to be done. Whereas there seems to be fairly unequivocal evidence of the benefits of R&D expenditure and new products for companies' operating results (Capon, Farley and Hulbert, 1988). Empirical research at the macro-level has thus far not discriminated between strategies focused on incremental kinds of r&D versus discontinuous R&d, despite case-based allegations of the importance of the latter (Tushman and O'Reilly, 1996). Indeed, the two approaches to innovation have entered into lively international debates on the appropriate bases for companies' and even countries' technology strategies.

The twentieth century witnessed many major innovations that created new markets and changed (and sometimes eliminated) old ones. There seems to be little reason to suppose that the twenty-first century will witness any fewer changes of this type… most pundits seem to expect more. Empirical research on the merits of alternative approaches to synthesizing the effects of innovation and new technology with marketplace success is vitally important, and we look forward to extending our work to much more comprehensive empirical analysis.

6.2 Limitations of the Research

The empirical findings must be evaluated in the light of certain limitations. These include:

(1) The possible occurrence of specification error resulting from the omission of further relevant archetypes from the model proposed in this study. The use of a theory-based model goes a considerable way in avoiding such an error but it cannot completely exclude the possibility that a relevant archetype has been 'overlooked'.

(2) One of the most significant difficulties in studies of constructs aimed at the development of theory, is the availability and strength of instruments. The following observations apply to scale developed in this study:

(i) The TOCO instrument developed to assess strategic market orientation is still in its early stage of development and assessment. This research can only be viewed as a first stage in scale development.

(ii) Although exhibiting quite acceptable coefficient alpha reliability scores, the TOCO instrument could probably be improved through the development of a larger battery of items covering further organisational dimensions.

(iii) The TOCO scale requires further replication work to establish its reliability and validity.

(3) The TOCO questionnaire contained 24 items making it relatively short. This would tend to minimise the potential of measurement error, however, such error possibility can never entirely be ruled out.

(4) The analysis was based on a relatively small sample, and although sufficient for the relatively simple analysis performed – it would have been more satisfactory had a larger sample(s) been available.

(5) The response rate, although relatively good in comparison with most mail surveys, must raise issues of non-response bias where non-respondents may hold views that are significantly different from those of respondents, thereby limiting the generalisability of the findings.

(6) The sample of the survey was restricted to the larger (in terms of the number of employees) South African firms. The findings of the research are therefore limited to this population only. However because of Pareto's (80/20) law, the companies in this study are likely to represent the bulk of larger SA firms. Also, by virtue of their size, these firms are on average probably more successful. Any generalisation to other populations, countries and so on, should be done with appropriate caution.

6.3 Future Research

One of the main areas for further research concerns the refinement of the measures used. Every instrument for measuring each of the archetypes requires further development and refinement, both from a theoretical perspective with a view to making it more relevant to firms, as well as to the items required to adequately capture each archetype. The interrelationships between the archetypes of this study and other constructs could provide various extensions and areas for further research.

Thus for example it is possible to investigate the effect of the strategic orientation of the firm on a whole host of variables such as advertising dynamism, pricing strategy, new product development, new product success, and - of course – overall firm performance. Moreover, it is possible to look at these relationships from two different perspectives and seek to compare firms at the top end of some scale with other companies at the bottom of the same scale – thus one could compare say the JSE's top 200 firms with the bottom 200 in terms of strategic archetype.

There are research opportunities for investigating the applicability and role (in terms of firm performance) of strategic archetype in different industries and of course various countries that operate in different cultural contexts and in economies at varying levels of development

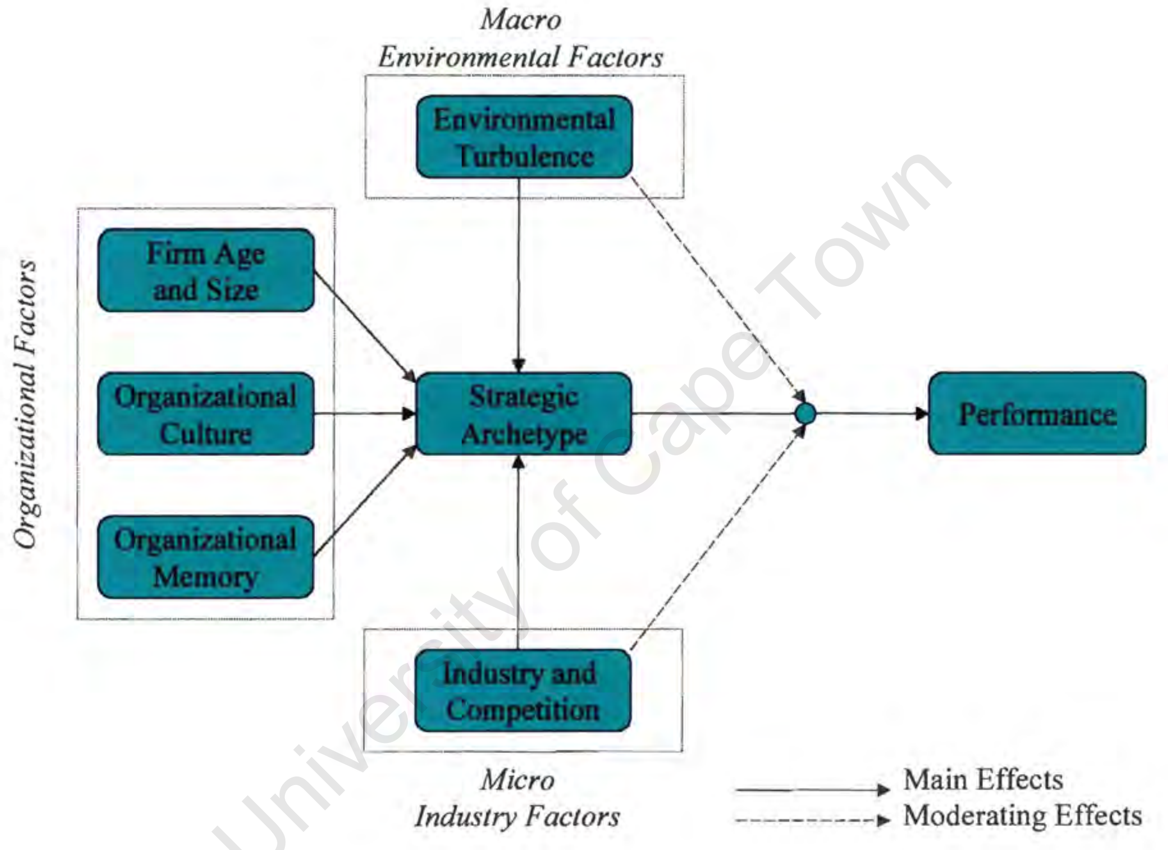
This research has implications both for theory development and for practising managers. The main contribution to theory development involves the confirmation of the notion of the four strategic archetypes, and the study also represents a significant step in the development of an instrument to measure each of the archetypes.

There are a number of implications of the study for practising managers. The instrument developed in this research is available for managers to assess their own companies' orientation. Though further research is required there appears to be some ground for believing that the archetypes may have a significant impact on firm performance. This represents a major area for future research. Below in Figure 6.1 is a model of the antecedents and consequences of strategic orientation.

Antecedent factors are likely to comprise three concentric spheres:

- Organisational variables - such as firm age, size and memory development
- Micro-specific industry and competition variables – such as industry type, competitive intensity, market age, development and degree of oversupply.
- Macro-general environmental variables, such as environmental turbulence, economic cycle, government regulation, wider country societal and cultural factors.
- and factors related to specific problems.

Figure 6.1 Antecedents and Consequences of Strategic Orientation (Archetype)



6.5 Conclusion

To reiterate, the type and mode transitions discussed above have much in common with Schotter's (1981) perspective on economic institutions, namely that the institution's development can be inferred from the existence of an evolutionary problem, for every evolutionary economic problem requires a social institution to solve it. The history of marketing specifically (cf. Alderson, 1957), and of organizations generally (cf. Chandler, 1962; 1977), is consistent with this perspective. Vertically integrated functional organizations (such as Ford at the time of the Model T) dominated the early years of this century, when relatively stable market environments characterized by low customer purchasing power and simple customer preferences caused the focus to be on production. Following this, organizations became multi-divisional (e.g. GM in the Sloan years), in an attempt to be both product and market oriented. The environment of increased spending power and more sophisticated tastes both permitted and necessitated this. As this power and sophistication intensified, however, the multi-divisional organizations were in turn supplanted by some form of matrix organization, often attempting to align marketing more closely with science and engineering (Bartlett & Ghoshal, 1990). In the 1980s, matrices gave way to networks (cf. Powell, 1990; Iacobucci, 1996), as it became apparent that many effective organizations, such as those from Japan and Korea, owed their success to factors outside the firm.

Further, Duncan (1976) highlights a basic contradiction in organizational structures best suited to innovation versus efficient implementation. His proposal is that organizations should change shape in their transition from innovation to implementation. Analogously, in our model, changing from shaper mode to follower mode, might mean becoming far less organic, and more mechanistic. Indeed, the interacting firm might require the most radical organizational form of all - one which is constantly changing shape, structure, processes, and even objectives. Hedberg, Nystrom and Starbuck (1976) describe, and Huber (1984) alludes to, the "experimenting" organization, which is in a constant state of self-redesign, characterized by flexibility and adaptability; while others have referred to the effectiveness of Adhocracies (Duncan, 1976). A recent article in The Economist illustrates the phenomenon:

> 'To an unusual degree Silicon Valley's economy relies on what Joseph Schumpeter, an Austrian economist, called "creative destruction"..... the basic idea is (that) old companies die, and new ones emerge, allowing capital, ideas and people to be re-allocated' (Economist, 1997, p. S-7).

It would be tempting for managers to simply look at the strategic archetypes in the grid in figure 2, and oversimplify by assuming that there is one "wrong" focus for an organization (the isolate mode), and one ideal focus (the interact mode, which integrates customer and innovation orientations). While this might be appropriate in an ideal world, in reality there is no ideal or indeed, misplaced focus per se. Rather, it is more important that the mode in which the firm operates be pertinent to the environment in which it competes. As noted previously, a case can even be made for the isolation mode under certain circumstances, such as in times of crisis in commodity markets, or in the instances of major corporate mergers. The greater risk to the organization is a focus that is inappropriate to the circumstances, such as engaging customers in interaction, when all that the market requires is to be served, or attempting to serve and follow customers exclusively, when the market is ripe for shaping. Decision makers might benefit more from understanding what their current mode of focus is, and determining whether this mode is appropriate to the circumstances in which the organization finds itself, than from merely attempting to attain a particular focus, regardless of the situation.

We argue, therefore, that the issue is not one of insufficient customer focus, or inadequate attention to innovation, but rather of an inappropriate focus given environmental circumstances. Measures of customer and innovation orientation may allow managers to get an accurate picture of their firm's strategic mode of operation, but without considering environmental circumstance they will be unable to judge for themselves whether their current mode is suitable, or not.

To summarize, it is not and was not our intent to present an apostasy of the customer orientation philosophy. Rather, we intended to demonstrate that there was more than one mode of achieving business success. Customer or market orientation have generally evolved to focus on the serving, or the keeping of customers (as a perusal of the items in the various instruments proposed to measure it [cf. Deshpande and Farley, 1998] would confirm). To fully embody the concept of a business as originally espoused by Drucker and others in the 1950s, there is also a need to create customers, and innovation, a focus on technology, is central to meeting this need.

In this dissertation we have attempted to clarify and reconcile two of the most widely promoted theses in management today: the need for customer orientation and the requirement for better management of innovation. Both are key to understanding Drucker's original conception of the business enterprise, but each has at times at times been advocated to the exclusion of the other. We believe that any philosophy of management that appears to suggest there is a "magic bullet" does a disservice to both theory and practice. When considering customer and innovation orientations, managers must realize that they are not necessarily looking at an either/or decision, but rather they must ask which strategic posture will best help fulfill their companies' future goals and objectives.

REFERENCES

Aaker, D. (1991) *Managing Brand Equity*, New York, NY: Free Press

Alderson, W. (1957) *Marketing Behavior and Executive Action*, Homewood, IL: Richard D.Irwin

Band, W.A. (1991) *Creating Value for Customers,* New York, NY: John Wiley

Barnes, J.H., Daswar, A.K., and Gilbert, F.W. "Number Of Factors Obtained By Chance: A Situation Study", in Wilson E.J., Black W. (eds) *Developments in Marketing Science*, Vol XVII, Nashville, TN.: Academy of Marketing Science, 1994

Bartlett, C.A., and Ghoshal, S. (1990) Matrix Management: Not a Structure, A Frame of Mind, *Harvard Business Review*, July-August

Beeby, W. (1983) Manufacturing Information Flow, *U.S. Leadership in Manufacturing*, Washington, DC: National Academy of Engineering, p.86

Berthon, P.R., Hulbert, J.M., and Pitt, L.F (1996) *Structuring Companies for Markets*, Financial Times, (Mastering Management Series), August 16, p. 8

Berthon, P.R., Hulbert, J.M., and Pitt, L.F (1998) *Organizing For More Than Markets: A Conceptual Model And Preliminary Empirical Application.* Paper presented at the Winter Educators Conference, American Marketing Association, Austin, Texas, February

Blattberg, R.C. and Deighton, J. (1991) Interactive Marketing: Exploiting the Age of Addressability, *Sloan Management Review*, Fall, 5—14

Bloom, P.N., and Greyser, S.A. (1981) The Maturity of Consumerism, *Harvard Business Review*, (Nov-Dec), 130 - 139

Brown, M. (1994) *Richard Branson: The Inside Story*, London, UK: Headline

Brown, S.W. and Gaulden, C.F., Jr., "Replication and Theory Development", in S.W.Brown and R.P.Fisk [eds.], *Distinguished Essays in Marketing Theory*, New York, NY: John Wiley and Sons [1984]

Bulgin, R. (1997) Enter the Puma, *The Daily Telegraph*, June 21, pC3.

Car (1997b) Building a Class Leading Platform, April, p. 10.

Car. (1997a) No Two Rollers Will be the Same Again, February, p. 10.

Carpenter, G.S. and Nakamoto, K. (1989) Consumer Preference Formation and Pioneering Advantage, *Journal of Marketing Research*, 26 (August): 285-298.

Carpenter, G.S., Glazer, R. and Nakamoto, K. (1994), Meaningful Brands from Meaningless Differentiation: The Dependence on Irrelevant Attributes, *Journal of Marketing Research*, 31(August), 339-350.

Chandler, A.D. (1962) *Strategy and Structure*, Cambridge, MA: MIT Press

Chandler, A.D. (1977) *The Visible Hand: The Managerial Revolution in American Business*, Cambridge, MA: Harvard University Press

Churchill G.A. Jr., (1979), *A Paradigm for Developing better Measures of Marketing Constructs*, Journal of Marketing Research, XVI, (February), 64-73

Churchill, G.A. Jr. "A Paradigm For Developing Better Measures of Marketing Constructs", *Journal of Marketing Research*, Vol. XVI, February 1979, pp 64-73.

Churchill, G.A. Jr., and Peter, J.P. "Research Design Effects on the Reliability of Rating Scales: A Meta-Analysis", *Journal of Marketing Research*, Vol. XXI, November 1984, pp 360 - 375

Clark, K.B., and Fujimoto, T. (1991) *Product Development Performance*, Boston, MA: Harvard Business School Press

Cronbach, L.J. "Coefficient Alpha and the Internal Structure of Tests", *Psychometrika*, Vol. 16, No. 3, September 1951, pp 297 - 333

D'Aveni, R. (1994) *Hypercompetition*, New York, NY: Free Press.

Day, G.S. (1990) *Market Driven Strategy: Processes for Creating Value*, New York, NY: Free Press

Day, G.S. (1994) Capabilities of Market-Driven Organizations, *Journal of Marketing,* 58 (October), 37-52

Deschamps, J-P (1994) Managing the Marketing/R&D Interface, *Prism*, 4, 5-19.

Deshpandé, R., Farley, J.U., and Webster, F.E. Jr. "Corporate Culture, Customer Orientation and Innovativeness in Japanese Firms: A Quadrad Analysis", *Journal of Marketing*, Vol. 57, January 1993, pp 23-37.

Dess G.G., and Robinson R.B., "Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit", *Strategic Management Journal*, Vol. 5, Jul-Sep 1984, pp 265-273.

Dickson, P.R. (1992). Toward a General Theory of Competitive Rationality, *Journal of Marketing*, 56, January, 69-83.

Dickson, P.R. (1993) *Marketing Management,* Fort Worth, TX: The Dryden Press

Dobscha, S., Mentzer J.T., and Littlefield, J.E. "Do External Factors Play An Antecedent Role To Market Orientation?", in Wilson E.J., Black W. (eds) *Developments in Marketing Science*, Vol XVII, Nashville, TN.: Academy of Marketing Science, 1994

Drucker, P. F. (1954) *The Practice of Management*., New York, NY: Harper and Row.

Drucker, Peter (1954) *The Practice of Management*, New York, NY: Harper & Row, pages 37-41.

Duncan, R.B (1976) The Ambidextrous Organization: Designing Dual Structures for Innovation, In *The Management of Organizational Design*, Vol. 1. Eds. Kilman, R.H., Pondy, L.R., and Slevin, D.P., New York, NY: Elsevier

Easley, R.W., Madden, C.S., and Dunn, M.G. "A Review and Extension of the Role of Replication", in Achrol, R., and Mitchell, A., (eds.) *Enhanciing Knowledge Development in Marketing: 1994 AMA Educators' Proceedings*, Vol. 5., Chicago, IL: American Marketing Association, p 205

Economist (1996) Freer Than Free, August 17th .

Economist (1997) A Survey of Silicon Valley, March 29th.

Economist (1997) America Online, February 1st.

Epstein, S. (1980) as cited in Easley, R.W., Madden, C.S., and Dunn, M.G. "A Review and Extension of the Role of Replication", in Achrol, R., and Mitchell, A., (eds.) *Enhanciing Knowledge Development in Marketing: 1994 AMA Educators' Proceedings*, Vol. 5., Chicago, IL: American Marketing Association, p 205

Felton A.P. "Making the Marketing Concept Work," *Harvard Business Review*, Jul-Aug 1959, pp 55-65.

Fjellman, S.M. (1992) Vinyl Leaves: Walt Disney and America, Boulder, CO: Westview Press.

Flight International (1993) Tailor Made Twinjet, December 8th.

Galbraith, J. K., (1967) *The New Industrial State,* Boston, MA: Houghton Mifflin.

Gatignon, H., and Xuereb, J-M. (1997) Strategic Orientation of the Firm and New Product Performance, *Journal of Marketing Research*, 34, February, 77-90.

Glazer, R., (1997) Strategy and Structure in Information-Intensive Markets: The Relationship Between Marketing and IT, *Journal of Market-Focused Management,* Forthcoming.

Gouillart, F. and Sturdivant, F., (1994) Spend a Day in the Life of Your Customers, *Harvard Business Review*, Jan-Feb.

Grönroos, C. "The Marketing Strategy Continuum: Towards a Marketing Concept For the 1990's", *Management Decisions*, Vol. 29, No 1, 1991, pp 7-13.

Gupta, A.K., Raj, S.P., and Wilemon, D. (1986) A Model for Studying R&D-Marketing Interface in the Product Innovation Process, *Journal of Marketing*, April, 7 - 17

Hall, W. (1980) Survival Strategies in a Hostile Environment, *Harvard Business Review*, January-February, 75-83

Hamel, G. and Prahalad, C.K. (1991) Corporate Imagination and Expeditionary Marketing, *Harvard Business Review*, July-August, 81 - 92.

Hamel, G. and Prahalad, C.K. (1994) *Competing for the Future*, Harvard: Harvard Business School Press.

Hannan, M.T. and Freeman, J. (1977) The Population Ecology of Organizations, *American Journal of Sociology*, 82: 929-963.

Hannan, M.T. and Freeman, J. (1984) Structural Inertia and Organizational Change, *American Sociological Review*, 49 (April), 149–164

Hayes, R.A, and Abernathy, N.J. "Managing Our Way to Economic Decline", *Harvard Business Review*, Jul-Aug 1980, pp 67-77.

Hayes, R.D. (1995) Digital Palsy: RSI and Restructuring Capital. In: *Resisting the Virtual Life*, Brook, J. and Boal, I. (Eds.) San Francisco, CA: City Lights.

Hedberg, B., Nystrom, P.C., and Starbuck, W.H. (1976) Camping on Seesaws: Prescriptions for a Self-Designing Organization, *Administrative Science Quarterly*, 21 (March), 41-65

Heide, J., and John, G. (1990) Alliances of Industrial Purchasing: The Determinants of Joint Action in Buyer-Seller Relationships, *Journal of Marketing Research*, XXVII, February, 24 - 36

Hirschman, E.C. "Aesthetics, Ideologies and the Limits of the Marketing Concept", *Journal of Marketing*, Vol. 47, July 1983, pp 45-55.

Hofer, C., and Davoust, M. (1977) *Successful Strategic Management*, Chicago, IL: A. T. Kearney

Houston, F.S. "The Marketing Concept: What It Is and What It Is Not", *Journal of Marketing*, Vol. 50, April 1986, pp 81-87.

Huber, G.P. (1984) The Nature and Design of Post-Industrial Organizations, *Management Science*, 30 (August), 928-951

Iacobucci, D. ed. (1996) *Networks in Marketing*, Thousand Oaks, CA: Sage

Jaworski, B.J. and Kohli, A.J. (1993). Market Orientation: Antecedents and Consequences, *Journal of Marketing*. 57, July, 53-70.

Johanson, J., and Nonaka, I. (1987) Market Research the Japanese Way, *Harvard Business Review*, May-June, 29–32

Kaldor, A.G. "Imbricative Marketing", *Journal of Marketing*, Vol. 35, April 1971, pp 19-25.

Keith, R.J. (1960), The Marketing Revolution, *Journal of Marketing*, 24, (January), 35 - 38.

Kodama, F. (1995) *Emerging Patterns of Innovation: Sources of Japan's Technological Edge*, Boston, MA: Harvard Business School Press

Kohli, A.K., and Jaworski, B.J. "Market Orientation: The Construct, Research Propositions, And Managerial Implications", *Journal of Marketing*, Vol. 54, April 1990, pp 1-18.

Kohli, A.K., Jaworski, B.J. and Kumar, A. (1993) MARKOR: A Measure of Market Orientation. *Journal of Market Research*, XXX (Nov): 467 - 477.

Kotler, P. *Marketing Management - Analysis, Planning, Implementation and Control, 7ed.*, New Jersey: Prentice-Hall, 1991.

Levitt, T, "Marketing Myopia", *Harvard Business Review*, Jul-Aug 1960, pp 45-56.

Mander, J. (1991) *In the Absence of the Sacred: The Failure of Technology and the Survival of the Indian Nations*. San Francisco, CA: Sierra Club.

Martin, J. (1995) Ignore Your Customer. *Fortune*, May: 121-126.

McGarvey, J. (1995) Interactive Kiosks Make a Fashion Statement, *Inter@ctive Week*, September, 11, p.24.

McGee, L.W., and Spiro, R.L. "The Marketing Concept In Perspective", *Business Horizons*, Vol. 31, , No. 3, May-June 1988, pp 40-45.

McKitterick, J.A.B. (1957) What is the Marketing Concept? in Frank M. Bass (ed.) *The Frontiers of Marketing Thought and Science*, Chicago, IL: The American Marketing Association, pp. 71-82.).

Miller, D., and Friesen, P.H. (1983) Strategy-Making and Environment: The Third Link, *Strategic Management Journal*, Summer, 221-235

Morgan, R.M., and Hunt, S.D. (1994) The Commitment-Trust Theory of Relationship Marketing, *Journal of Marketing*, 58 (July), 20-38

Morris, M.H., Davis, D.L., and Allen, J.A. (1991) Perceived Environmental Turbulence and its Effect on Selected Entrepreneurship, Marketing, and Organizational Characteristics, *Journal of the Academy of Marketing Science*, 19 (Winter), 43 - 51

Narver, J.C. and Slater, S.F. (1990) The Effect of a Market Orientation on Business Profitability. *Journal of Marketing*, 54 (October): 20-35.

Narver, J.C., Park, S.Y., and Slater, S.F. (1990) Relative Emphasis In A Market Orientation And Its Effect On Business Profitability, *AMA Summer Educators Conference Proceedings*, Chicago: American Marketing Association.

Naumann,E. (1995) *Creating Customer Value*, Cincinnati, OH: Thompson Executive Press

Nunnally, J.C. *Psychometric Theory 2nd. ed.*, New York: McGraw Hill, 1978

Packard, V.(1957) *The Hidden Persuaders,* New York, N.Y., Pocket Books.

Parasuraman, A., Zeithaml, V.A., and Berry L.L. "SERVQUAL: A Multiple-Item Scale For Measuring Consumer Perceptions Of Service Quality", *Journal of Retailing*, Vol. 64, (Spring), No. 1, 1988, pp 12-40.

Pearce, J.A., Robbins, D.K., and Robinson R.B. "The Impact of Grand Strategy and Planning Formality on Financial Performance", *Strategic Management Journal*, Vol. 8, Mar-Apr 1987, pp 125-134.

Peppers, D., and Rogers, M. (1993) *The One-to-One Future: Building Relationships One Customer at a Time*, New York, NY: Currency Doubleday.

Peter, J P (1979), *Reliability: A Review of Psychometric Basics and Recent Marketing Practices*, Journal of Marketing Research, 16, 6-17.

Peter, J P (1981), *Construct Validity: A Review of the Basic Issues and Marketing Practices*, Journal of Marketing Research, 18, 133-145.

Pine, B.J., II (1993) Making Mass Customization Work, *Harvard Business Review*, September-October, 108-111

Pine, B.J., II, Peppers, D., and Rogers, M. (1995) Do You Want to Keep Your Customers Forever?, *Harvard Business Review*, March-April, 103-114

Pitt, L.F., Caruana, A., and Berthon, P.R. (1996) Market Orientation and Business Performance: Some European Evidence, International Marketing Review, 13, 1, 5-16

Powell, W.W. (1990) Neither Market nor Hierarchy: Network Forms of Organization, in *Research in Organizational Behavior.* Eds. L.L. Cummings and B.M. Staw. Greenwich, CT: JAI, 295–336

Quinn, J.B. (1986) Managing Innovation: Controlled Chaos, *Harvard Business Review*, May-June, 73-84

Quinn, J.B. (1992) *Intelligent Enterprise,* New York, NY: Free Press

Reukert, R.W. "Developing A Market Orientation: An Organisational Strategy Perspective", *International Journal of Research in Marketing*, Vol. 9, No. 3, 1992, pp 225-245.

Romanelli, E. and Tushman, M.L. (1986) Inertia, Environments, and Strategic Choice: A Quasi-experimental Design for Comparative-Longitudinal Research, *Management Science*, 32: 608-621.

Runyon, K.E. *Consumer Behaviour, 2ed.*, Ohio: Bell & Howell, 1980

Schotter, A. (1981) *The Economic Theory of Social Institutions*, New York, NY: Cambridge University Press

Schumpeter, J.A. (1939) *Business Cycles*, New York, NY: McGraw-Hill

Shanklin, W.L., and Ryans, J.K., Jr. (1984) Organizing for High-Tech Marketing, Harvard Business Review, November - December, 164 - 171

Shapiro, B.P. "What The Hell Is 'Market Oriented'?", *Harvard Business Review,* Vol. 6, Nov-Dec 1988, pp 119-125.

Slater, S.F. and Narver, J.C. (1991). Becoming More Market Oriented: An Exploratory Study of the Programmatic and Market-Back Approaches, Cambridge, MA: Marketing Science Institute Report No. 91-128.

Slater, S.F. and Narver, J.C. (1995) Market Orientation and the Learning Organization, *Journal of Marketing*, Vol. 59 (July): 63-74.

Smith, L. (1980) A Miracle in Search of a Market, *Fortune*, December 1, 92 - 98

Souder, W.E. (1987) *Managing New Product Innovations*, Lexington, Mass.: Heath

Spekman, R.E., and Salmond, D. (1992) A Working Consensus to Collaborate: A Field Study of Manufacturer-Supplier Dyads. *MSI Working Paper, Report No. 92-134* Cambridge, MA: Marketing Science Institute, December

The Times (1997) Bentley Goes Back to the Future, July 19th

Tichy, N.M. and Devanna, M.A. (1986) *The Transformational Leader*. New York, NY: Knopf.

Tushman, M. and O'Reilly, C (1996) Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change, *California Management Review*, Vol. 38 (4), 8-30.

Urban, G.L., Carter, T., Gaskin, S., and Mucha, Z., Market Share Rewards of Pioneering Brands: An Exploratory Analysis and Strategic Implications, *Management Science,* 32(June), 645-659.

Utterback, J., Allen, T.J., Holloman, J.H., and Sirbu, M.A., Jr. (1976) The Process of Innovation in Five Industries in Europe and Japan, *IEEE Transactions on Engineering Management,* 23 (1), 3-9

Virany, B., Tushman, M., and Romanelli, E. (1992, Executive Succession and Organizational Outcomes in Turbulent Environments: An Organizational Learning Approach , *Organization Science,* Vol. 3(1), 72-92.

Webster, F.E. Jr. (1988) The Rediscovery of the Marketing Concept, *Business Horizons*, 32, 3(May-June), 29 - 39

Webster, F.E. Jr. (1994) *Market Driven Management: Using the New Marketing Concept to Create a Customer-Driven Company*, New York, NY: John Wiley and Sons, p 10.

Webster, F.E. Jr. "The Changing Role Of Marketing In The Corporation", *Journal of Marketing*, Vol. 56, October 1992, pp 1-17.

Webster, F.E. Jr. "The Rediscovery of the Marketing Concept", *Business Horizons*, Vol. 31, No. 3, May-Jun 1988, pp 29-39.

Weiner, N. (1954) *The Human Use of Human Beings: Cybernetics and Society.* New York, NY: Doubleday.

Wind, J., Green, P.E., Shifflet, D., and Scarborough, M.(1989) Courtyard by Marriott: Designing a Hotel Facility with Consumer-Based Marketing Models, Copyright - The Institute of Management Sciences, in Lovelock, C.H., (1992) *Managing*

Services: Marketing, Operations and Human Resources, Englewood Cliffs, NJ: Prentice-Hall International, 119–137

Woodruff, R.T. (1997) Customer Value: The Next Source for Competitive Advantage, *Journal of the Academy of Marketing Science*, 25, 3, 139-153