

**STRATEGIC ISSUES IN PURCHASING MANAGEMENT FOR
MANUFACTURING ENTERPRISES**

by

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SUMMARY

The study *"Strategic issues in purchasing management for manufacturing enterprise"* considers the premise that manufacturing enterprises are facing increased competition and are operating in a dynamic environment. A detailed literature survey was undertaken and an empirical study of a sample of one hundred and fifty industrial enterprises was conducted. The findings of the study indicate that enterprises are constantly adapting to changes in the marketplace. The changes include regulations, deregulations, globalization, advancing customer focused technology and services, growing quality requirements and constant cost improvement pressures. Strategically managing purchased goods and services positions manufacturing enterprises to turn these changes into a competitive advantage by leveraging the company's purchasing power and maximizing the contribution of the supply base through mutually aligned interests.

The study presents an opportunity for the purchasing department to stand out as a strategic leader. The study offers specific plans on how strategic management of purchased goods and services can contribute to the enterprise's objectives. In order to achieve the overall objectives of the enterprise, the purchasing department must clearly understand what are the strategic issues in purchasing management and must define its role in the change effort. In addition it must plan for implementation of the change throughout the enterprise. Within this context purchasing is identified as a constantly evolving function in its role as a marketer to the internal customers within the manufacturing enterprise, marketer to the external suppliers and a participant in the corporate management process. This study examines the evolution of purchasing and projects trends which are concomitant with strategic purchasing.

"Strategic issues in purchasing management for manufacturing enterprise" notes that the management of sources of materials and services is of vital

importance especially for manufacturing enterprises. In addition the study recognises changes in customer demands and competitive offerings and noted the gaps between early strategic involvement of purchasing and product innovation management. The new product development process requires purchasing's input in view of the fact that outside suppliers will provide materials that constitute a majority of the cost of a new product. In addition, suppliers may provide new product and process technologies that are critical to the development effort. Purchasing is ideally located to manage this interaction.

Considering the rapid evolution of the purchasing function, "*Strategic issues in purchasing management for manufacturing enterprise*" recommends that enterprises move away from the functional and transactional focused purchasing practices and move towards an approach requiring interaction with overall business objectives, business market intelligence, total cost decision making, cross functional input, more integrated supply base, management of the entire supply chain and finally customer focus. This relationship approach causes a shift in purchasing philosophy from low price buying to total cost management. This paradigm shift from that of managing a transaction, to that of managing the cost of an entire business process, the process that starts with design of the product or service and ends with the ultimate disposal of the product or completion of the service, propels purchasing closer to strategic business issues.

Finally, making recommendations on the basis of preconceived ideas is easier than coming up with advice based on evidence. Therefore, this study presents an opportunity and a point of departure for further research and debate in the areas of best practices and globalisation.

OPSOMMING

In die studie, "*Strategiese aspekte rakende aankoopbestuur in vervaardigings-ondernemings*", word die aanname ondersoek dat vervaardigingsondernemings toenemende mededinging in die gesig staar en in 'n mededingende omgewing moet funksioneer. Vanuit hierdie konteks beskou, behoort die aankoopfunksie binne die hiërargiese struktuur van die onderneming vanaf 'n posisie van "korporatiewe obskuriteit" tot 'n meer aktiewe en geïntegreerde rol ingespan te word. Topbestuur aanvaar huiwerig dat dit in 'n kostemededingende omgewing verstandig sal wees om aankope se winsgenererende potensiaal te ontwikkel. Die fokus van hierdie studie was om vas te stel of topbestuur die aankoopafdeling as 'n kundighedsentrum vir alle aangeleenthede wat betrekking het op die voorsieningsomgewing beskou. Sentraal tot die uitgangspunt om aankope as 'n kundighedsbron te ontwikkel, is die vermoë van aankoopbestuurders om hul fokus tot groter as die tradisionele rol van die aankoopafdeling te verbreed. Dit impliseer 'n herfokus van die aankoopafdeling se poging om genoemd te wees met meer strategiese oorwegings, weg van die tradisionele en meer taktiese kwessies van aankope, naamlik die regte produkte in die regte hoeveelhede en teen die regte pryse.

'n Uitgebreide literatuurondersoek is gedoen en 'n empiriese studie, gegrond op 'n steekproef van 'n honderd-en-vyftig industriële ondernemings, is uitgevoer. Die bevindings dui daaropdat ondernemings voortdurend by veranderings in die mark aanpas. Die veranderings sluit die volgende in: regulering, deregulering, gerigtheid op 'n wereldmark, die opkoms van kliëntgerigte tegnologieën dienste, toenemende kwaliteitsvereisies en voortdurende druk op kostebesparing. Volgens 'n omvattende literatuurondersoek kan vervaardigingsondernemings hulself met behulp van die strategiese aankoopbestuur van goedere en dienste op so 'n wyse posisioneer dat hulle die genoemde veranderings tot 'n mededingende voordeel kan aanwend, die maatskappy se aankoopkrag benut en die bydrae van die voorsieningsbasis te maksimiseer deur onderlinge belange te versoer. Die

bevindinge van hierdie studie bevestig egter dat daar min of geen betekenisvolle betrokkenheid van aankope in strategieformulering voorkom nie. Die onverantwoordbare beskouing van aankope reduseer dit tot 'n suiwer klerikale funksie. Dit word verder gereflekteer in die verwerping van die hipotese dat aankope 'n gedeelde besluit is. Nog 'n bevinding van die studie is dat die huidige praktyke, wat die omvang van die aankoopfunksie karakteriseer, oor die volgende vyf jaar onveranderd sal bly. Hierdie bevinding geld vir alle soorte bedrywe, naamlik klein, medium en groot.

Die navorsing wys op geleentheid wat die aankoopafdeling om uit te styg as 'n strategiese leier. Spesifieke planne waardeur die strategiese bestuur van aangekoopte goedere en dienste kan bydra tot die onderneming se doelwitte, word ook uitgewys. Ten einde die oorkoepelende doelwitte van die onderneming te bereik, moet die aankoopafdeling 'n duidelike begrip hê van die strategiese vraagstukke by aankoopbestuur en die afdeling moet sy eie rol in die herposisionering duidelik omskryf. Verder moet beplan word vir die implementering van die strategiese verandering regdeur die onderneming. Binne hierdie konteks word aankope aangedui as 'n voortdurend ontwikkelende funksie, wat 'n rol speel as 'n bemarker aan die interne gebruikers binne die onderneming, bemarker aan die eksterne leweransiers asook as 'n aktiewe deelnemer aan die korporatiewe bestuursproses. Die studie ondersoek ook die ontwikkelings rakende aankope en projekteer tendense wat vir strategiese beplanning van belang is.

Die studie "*Strategiese aspekte rakende aankoopbestuur in vervaardigings-ondernemings*" toon aan dat die bestuur van goedere en dienstebronne van deurslaggewende belang vir veral die vervaardigingsondernemings is. Verder identifiseer die studie veranderinge in kliënteverwagtings en mededingende aanbiedinge en dui ook gapings tussen vroeë strategiese betrokkenheid van aankoop en produkontwikkelingsbestuur aan. Die nuwe produkontwikkelingsprosesse vereis die aankoopafdeling se insette, omdat eksterne leweransiers materiaal verskaf wat 'n groot gedeelte van die koste van 'n nuwe produk

bepaal. Hierbenewens mag leweransiers ook oor nuwe produk- en proses-tegnologie beskik wat belangrik is vir die ontwikkelingspoging kan wees. Die aankoopafdeling is in die ideale situasie om hierdie interaksie te bestuur.

Met inagneming van die snelle ontwikkeling van die aankoopfunksie, word aanbeveel dat ondernemings wegbeweeg van die funksionele- en transaksiegerigte aankooppraktyke. Hulle behoort eerder 'n benadering na te streef wat die oorkoepelende ondernemingsdoelstellings, omgewingsinligting, totale kostebesluitneming, vasstelling, kruisfunksionele insette, 'n meer geïntegreerde voorsieningsbasis, bestuur van die hele voorsieningsketting en klantgerigtheid integreer. Dit vereis egter 'n verskuiwing in die aankoopfilosofie van lae prysaankope na totale kostebestuur en uiteindelik klantgerigtheid. Sodanige paradigroverskuiwing weg van die bestuur van 'n transaksie, na die bestuur van 'n algehele bedryfsproses, 'n proses wat begin met produk of voltooiing van die diens bring aankope nader aan die strategiese vraagstukke van die onderneming.

Dit is ten slotte makliker om aanbevelings te maak op grond van vooropgestelde idees, eerder as om advies te gee op grond van empiriese bewyse. Daarom poog hierdie studie om 'n vaste vertrekpunt vir verdere navorsing te bied en om 'n bydrae te lewer tot die debat waarin na die beste metodes in internasionale verband gesoek word.

PART A

AN OVERVIEW AND ORIENTATION OF STRATEGIC ISSUES IN PURCHASING IN MANUFACTURING ENTERPRISES

Major changes have occurred in business and purchasing in the past few years, and are still occurring. Purchasing professionals are encountering an environment of dynamic change. Evolutionary changes are taking place within the enterprise, within the supplier's enterprise, within the macro socio-economic environment and within the political environment. The need to effectively manage change is of paramount importance. To monitor and stay abreast of these evolutionary changes, research has to be conducted and documented.

Purchasing as an activity plays a vital role in the competitive advantage of the enterprise, especially when one considers that a typical enterprise may spend sixty percent of its revenue with outside suppliers. For the entire enterprise to experience a consistent level of success in today's rapidly changing environment, purchasing operations and activities need to be synchronised with the strategy of the firm and attuned with the variable internal and external forces. The question that needs to be considered is whether the purchasing function can serve the growing enterprise with ordinary service, utilise methods and procedures of a decade ago, and have one set of approach for all possible tasks. As enterprises adapt to ever changing situations and move towards more proactive strategic modes of operation, purchasing also needs to progress through various stages of evolution.

Strategy can specifically be defined as a plan of action for realising specific objectives. However, in general strategy has been defined as a discernible pattern over time in a stream of corporate decisions. If these definitions are accepted, any stream of decisions, whether good or bad, could be considered and are indeed strategies. The great restraint arises when one examines the

purpose of all corporate and functional level strategies, including purchasing, is the development of sustainable competitive advantage. Therefore, the relevant issue is not whether functional level strategies exist but whether they contribute to the development of competitive advantage and superior corporate performance over time. Much has been written about purchasing strategy, but the actual impact of purchasing strategies on corporate performance has been neither empirically substantiated and rigorously examined. The fact that purchasing decisions can have an impact on the enterprise's performance has been recognised for years. Research has shown that firms operating in the same market while following similar strategies can have dramatically different levels of performance. How can these differences exist? This study examines whether such varying levels of an enterprise's performance result from differences in functional level capabilities and strategies.

To realise the full potential of purchasing and materials management, the department should become involved and be a contributor to the firm's strategic planning process. Top management should know where the future materials for growth and new products will come. Are the sources assured? Will prices be predictable and affordable? How are suppliers discovered, developed, and managed for the enterprise's benefit? How will new products be supported through their life cycles? Will there be external technology to support new products? Which suppliers will be in business in the next five or ten years? What forms of supplier relationships will yield the best business results for the enterprise and its suppliers?

Some questions arise: Does purchasing have a role in corporate strategy? Does purchase performance impact upon corporate performance? Is purchasing really strategic? This part, namely Chapter One, critically examines the theme of the study: *Strategic issues in purchasing management for manufacturing enterprises*, places the study in perspective and presents a systematic format for the study.

It should be noted that the focus of the research is not on day-to-day purchasing decisions *per se*, although the findings will generate information which is relevant to these more tactical/operational purchasing decisions. Efforts will rather be directed towards those more important purchasing decisions involving those uncontrollable environmental forces which impact on an enterprise's ability to secure materials and affect its competitive posture.

CHAPTER ONE

ORIENTATION AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

This opening chapter embodies the theme of the study: *Strategic issues in purchasing management for manufacturing enterprises*. It places the study in perspective and presents a systematic format for the study. In addition the purpose of this study and its significance are clearly illustrated. The scope and limitations of the study are also presented. The Chapter commences with a brief literature survey on the traditional role of purchasing as a service provider, the importance of purchasing and materials management is then critically examined and the evolution of strategic purchasing is thereafter presented. The sole intention of this brief literature survey is to provide impetus for the study. Finally, the hypothesis are listed and an outline of each chapter of the study is given.

1.1.1 Placing purchasing in perspective

Purchasing refers to the business activity of buying materials, supplies and services needed to reach the objectives of an enterprise. Fearon, Dobler and Killen (1993:5-9) suggest that "*in a narrow sense, purchasing defines the process of buying ... an in general purchasing's objectives can be summarised around the seven rights, buying the right quality, right quantity, right time, right price, right source, right service and right place. These seven areas constitute the bulk of the challenges that confront purchasing professionals.*" Fundamentally, the basic elements involved in carrying out the purchasing function are obtaining the proper equipment, material, supplies and service in a manner satisfactory to the needs of the enterprise. This calls for a varied scope of responsibilities which make purchasing an essential component to an enterprise's strategic management and planning.

The valuable contributions that purchasing makes to the overall success of an enterprise are well beyond the simple act of buying or dealing with sales persons. Dobler and Burt (1996:19) describe purchasing as one of six basic functions common to all types of enterprises, namely, **creation**: the idea or design function; **finance**: the capital acquisition, financial planning and control function; **human resources**: the personnel resources and labour relations function; **purchasing**: the acquisition of required materials, services and equipment; **conversion**: the transformation of materials and ideas into economic goods and services; and **distribution**: the marketing and selling of goods and services produced for the user.

In addition to the acquisition of materials, services and equipment, a purchasing professional responsibilities, according to Russil (1997:5-7) include, management functions such as planning and policy making, motivation, evaluation and control as well as a broad range of related activities. Russil (1997:39-40) suggests that modern day industrial buyers are involved in at least five key activities. These include:

- leading** discussions to determine sourcing requirements and availability;
- developing**, selecting and managing the most effective suppliers;
- securing** purchases that minimise total cost of use;
- ensuring** timely delivery, meeting the specified quality, quantity and other related services; and finally,
- meeting** the needs in most cost effective manner for both internal and external customers.

In some instances, industrial buyers are individually responsible for these activities and in others they are part of a team sharing these responsibilities.

1.1.2 Purchasing's traditional service provision image

The term purchasing is too often used to connote the purchasing of materials, supplies and services. In a narrow sense the day to day activities of purchasing involve detecting the needs of the enterprises, identifying sources of supply,

selecting suppliers, arriving at an appropriate price, issuing the contract and expediting to ensure proper delivery. Unfortunately, this unduly narrow view of purchasing relegating it to a purely clerical function. Such a narrow view of purchasing is neither correct nor useful. A broader and more accurate view of the role of the buyer needs to be considered and documented.

In the nineteenth century, Elbert Hubbard (as cited in Boone and Stevens 1970:48) described the typical buyer as "*...a man past middle-life, spare, wrinkled, intelligent, cold, passive, noncommittal, with eyes like a codfish, polite in contact, but at the same time, unresponsive, cool, calm, and damnably composed as a concrete post or a Plaster of Paris cat, a human petrification with a heart of feldspar without charm or a sense of humor. Happily they never reproduce and all of them go to hell.*" While Elbert Hubbard's words are those of a nineteenth century buyer, the question is to what extent is this portrait of a cold, calculating, economically rational man an accurate portrayal of the modern buyer and to what extent is it a gross caricature.

Current academic researchers in purchasing and materials management, among whom one can include Van Weele (1994), Hines (1996), Hugo, Van Rooyen and Badenhorst (1997) and Chisnall (1995) and purchasing and materials practitioners such as Reeds and Nelson (1995) and Ansari and Modarres (1994) suggest that a painstaking examination of the production system in small, medium and large industrial enterprises will produce a detailed list of inputs, each of which could probably be placed in one of three categories, namely **labour and managerial skills, supplies and equipment** and **raw materials**. The provision of materials and is the **traditional** responsibility of the purchasing department. This traditional responsibility of purchasing has cast it in a service role.

The usefulness of the service perspective has been the reinforcement that needs generated elsewhere in the enterprise have to be satisfied. This internal customer satisfaction perspective suggests that there should be a separation between those who generate the need (**marketing**), those who utilise what is required

(**production**), those who purchase (**purchasing**) and those who pay (**finance**). Keeping these groups of people apart served the audit and financial requirements with respect to the responsibility of funds. As long as these groups were physically separated, the possibilities of fraud would be minimised. This also gives each function a reasonable amount of autonomy. It does not really matter how **purchasing** is done as long as each function receives what is wanted. The primary interest of auditors, aside from the prevention of fraud, centres on procedural compliance rather than value for money spent. The traditional service perspective has probably been useful and necessary stage in the evolution of the profession. As a result of the very large proportion of input costs, and hence total manufacturing costs, which are taken up with materials, the purchasing department cannot afford to confine itself to the **traditional** responsibility but should execute a vitally important part in the effectiveness, efficiency and the formulation of competitive and corporate strategy.

1.1.3 The importance of purchasing and the management of materials

It is undoubted that in many modern manufacturing enterprises, the enormous cost of raw materials acquisition, is entrusted to the purchasing department. It is not the intention to present a detailed discussion of the importance of purchasing and the management of materials in this section. However, a brief overview is necessary to place the study in perspective. According to Bailey and Farmer (1990), the growing importance of purchasing and materials management can be ascribed to the increasing specialisation which characterises the industrial system as a whole. The overall management of materials is an organisational philosophy that has evolved through application of the systems approach to management which provides for integration of all management functions. The primary materials management objective is to co-ordinate all business activities that are part of the material cycle, from supplier through the enterprise's operations and on to the customer. However, according to Colton and Rohrs (1985:2) purchasing and materials management is: *"a wide spectrum of varied activities and is totally committed to providing a smooth flow from suppliers to production to finished goods inventory to*

customers." With specific reference to the varied activities, Muller (1992) identified sixty nine-different tasks of the purchasing and materials department. Magad and Amos (1995:vii) consider materials management as the "*frontier for maximising profit in the 1990's.*" Harding (1990:3) argues that the most significant cost in most manufacturing businesses is the cost of materials. He further points out that the American national average in respect of materials purchased is sixty percent of the cost of manufacturing, with high-tech and consumer electronics going as high as ninety percent.

In further examining the importance of purchasing in the American economy, Heinritz et.al. (1991:4-6) point out that on the average, more than half of every dollar taken in as income from sales of manufactured products is spent for the purchase of materials, supplies and equipment needed to produce the goods. The amounts involved in purchasing, even in enterprises of moderate size, could also be considered substantial. This in essence should be demanding prudent and skilful administration and the formulation of effective purchasing and material management strategies among industrial enterprises. Consistent with this, if one accepts the assumption that a firm seeks its objectives through the medium of profit, and more specifically, through the conversion of its raw materials and other resources into goods and services and then obtaining a return on these by marketing them to customers, then it clearly stands to reason that purchasing is the key ingredient in the formula for the enterprise's success.

In tracing the historical evolution of the purchasing department within American enterprises, Leenders and Fearon (1993:3-4) contend that interest in purchasing as a separate, important and profit contributing function of management has gained substantial momentum within the decade of the 1950s. In an examination of the British industrial markets, Hines (1996:2) contends that: "*Purchasing has until recently occupied a relatively obscure position in most enterprises and has been perceived primarily as a stand-alone function dealing at an operational level with the ordering and delivery cycle of materials from suppliers.*" However, Hines (1996:2) hastens to add that: "*...this is not the case with a small but growing*

minority of companies where purchasing is now becoming the new architect of value stream excellence."

1.1.4 Purchasing in South Africa

Despite its long history, however, it is only comparatively recent that the importance of efficient and scientific purchasing has become widespread in South Africa. Van der Merwe (1982) who undertook an investigation into purchasing management with specific reference to the function and status of the purchaser in 518 manufacturing enterprises in South Africa, illustrated that industrial enterprises at that stage did not realise the value of the purchasing department. Neither did they take real effort to manage this function scientifically. Malcomess (1991:16) in his study "**Management has an expensive blind spot in its make up**", asserts: "*S A management apparently sees little value in strong materials control and efficient purchasing.*"

In reviewing the historical development and present status of the purchasing function, Hugo, Van Rooyen and Badenhorst (1997:10-14) reflect the increasing importance of this function and conclude that enterprises are showing a relatively significant interest in the purchasing function. In presenting a list of reasons for the increasing importance of the purchasing function and its influence on other business functions, Hugo, Van Rooyen and Badenhorst (1997:10-15) suggest that increased productivity in South Africa is still related to labour inputs, while materials inputs remain of secondary importance, despite it being up to five times larger than labour inputs. This is in essence a contradiction in management since materials form the largest single cost item in most enterprises and its scientific management demands systems of multi-versatility such as purchasing knowledge, negotiation competence, transport optimisation, production, financing and strategic management. Adopting the same trend of thought, Hines (1996:2) maintains: "*that the success of an individual manufacturing system (such as the Toyota Production System) has not been the causal factor. Rather, it is the thorough and speedy implementation of these systems throughout the complete supplier network that*

is crucial to manufacturing success."

Preliminary discussions held with purchasing executives of four major industrial enterprises in KwaZulu-Natal confirm that some purchasing executives are no longer mired in the day-to-day purchasing decisions and as a consequence tend to devote more energy to the long range, strategic purchasing needs of their enterprises. Kotze and Kotze (1997) contend that South African enterprises are now confronted with diminishing growth opportunities, which result in a situation where an increase in turnover can only be realised at the expense of the competition and only with a great deal of effort. Kotze and Kotze (1997:8) make this abundantly clear that *"the country's economic future lies in the production of higher value added products, through a focus on customer needs to provide differentiated products to both the South African and global markets. Competing globally requires innovation in production processes, product design and delivery. This will only be possible if all components (purchasing) co-operate in their strive for global competitiveness."*

Since outlays for purchased materials greatly exceed labour and other costs in most industrial enterprises, improvements within the purchasing department can lead not only to permanent cost control systems, but also the achievement of the objectives of the enterprise. The purchasing and materials management function is ideally the cornerstone which no profit builder should reject.

1.1.5 Purchasing and strategic purchasing: A historical overview

In tracing the evolution of strategic purchasing, Adamson (1991:10-11) suggests that it is only in the last decade that purchasing has gained a place within the strategic direction of leading Western enterprises. Adamson (1991:10) asserts that: *"historically, there has been a perception in American industry that procurement and supply issues were rarely strategic in nature, that purchasing only involved short range decisions, and that the purchasing function couldn't or didn't need to be involved in corporate planning."* Rajagopal and Bernard (1993:13-20)

contend that purchasing strategy first achieved a general level of recognition and interest in the mid 1970's. Since then, however, published work has been sporadic, and formal instruction underdeveloped, when compared with areas such as marketing and business strategy. Specific recognition of purchasing's potentially positive role in corporate strategy is relatively new.

Research published by Farmer (1978:6-11) has questioned the contribution to be made by purchasing to corporate performance. This research shows that during a time of critical material shortages in 1973, the purchasing function did not move to improve either its role in its impact on corporate strategy. Throughout the 1970s, purchasing's role in an enterprise was viewed by many as much more administrative than strategic. Further research published during this period especially by Ammer (1974:36-159) suggests that top management viewed purchasing as playing a relatively passive role in the business organisation.

The status accorded to the purchasing function in an enterprise is determined to a certain extent by the image the function projects to personnel outside purchasing. Cavinato (1991:130-134) asserts that non-purchasing personnel tend to have a simplistic view of the purchasing function, and they demonstrate little regard for internal purchasing performance measures which they view as mainly tactical. According to Pearson and Gritzmacher (1990:91-99), the linkage between purchasing strategy and the performance by an enterprise is being established. Freeman and Cavinato (1990:6-10) affirm that enterprises are beginning to realise the impact of purchasing function on their competitive position, and purchasing personnel are gradually shifting their role from tactical to strategic.

Clearly, if purchasing is to sustain this move, from tactical to a strategic role, there must be a shift in focus by purchasing personnel from efficiency to effectiveness. Purchasing personnel must think in terms of the potential strategic implication of their actions and formulate coherent and integrated strategies.

The above discussion projects an image of the purchasing function which is of strategic importance to the enterprise and to a large extent a key factor in developing the overall strategy of the enterprise. Purchasing is more than supply. The field of the purchasing function extends from the purchasing market to inside the enterprise's gate. Buyers have an important role to play in development and engineering projects. They should be in a position to translate technical developments at the suppliers end in terms of the needs of the enterprise. The fact that there is a rich variety of purchasing requirements in many enterprises, makes it difficult to delineate the field of purchasing in practice. Therefore, purchasing may be considered an activity aimed at systematizing the purchasing process and achieving specific improvement of this process following changes in purchasing requirements.

This study, **Strategic issues in purchasing management for manufacturing enterprises**, centres on the assumption that the next century will open new frontiers in the perceptions of strategic purchasing. The question will no longer be, what does purchasing do for an enterprise but rather what can effective and strategic purchasing do to an enterprise?

1.2 PURPOSE OF THIS STUDY

Around the world and in South Africa in particular, the past decade has been marked by numerous important technological; political; economic and social developments which have had an impact on, inter alia, the significance and the conduct of an enterprise's purchasing and materials management personnel. The profound technological innovations and the internationalisation of markets are dramatically changing the nature of the environment in which many manufacturing enterprises operate their businesses. The above discussion and research findings confirm that the purchasing and materials department is undergoing re-evaluation by top management.

As a result of the implementation of improvement programmes in engineering, production and logistics management, many industrial enterprises feel the need for

improved relationships with suppliers. These relationships should result in engineering lead time reduction, just-in-time delivery and minimum defects on new and existing incoming parts. The purchasing department is the intermediary which records the agreements with suppliers on these issues and supervises their fulfilment. For any enterprise to be competitive, its major suppliers have to be competitive. This requires the purchasing function to be operational and strategic in its contribution.

Against this background, the purpose of this study is to identify strategic issues associated with purchasing in manufacturing enterprises and to recommend the formulation of strategies that lead to efficiency, effectiveness and competitiveness.

This requires an understanding of the complex industrial buying processes, strategy formulation, a framework for the analysis of the continuous process of problem solving, decision making and the various buying situations. In this regard this study also examines the factors associated with sustainable competitive advantage in manufacturing enterprises with specific reference to the purchasing function. The mixed motivations which influence industrial buyers, how buying decisions are taken, who is the key figure in deciding to buy particular raw materials, supplies and equipments, what is the contribution made by other members of the enterprise, supplier selection strategies and costing, size of the buying centre and the use of quantitative models will also be investigated. *Strategic issues in purchasing management for manufacturing enterprises* is the main focus of this study.

1.3 MOTIVATION FOR THIS STUDY

Baker (1993:93) presents an exhaustive list of research that was conducted on American and British industrial purchasing behaviour. However, Baker (1993:93) adds: *"the majority of the studies referred to are exploratory in nature; the principal methodologies have been the unstructured interview and the use of self reporting, both with the consequent problems of subjectivity and bias and a general lack of rigour."* Chisnall (1986:16) cites a study conducted by Graham and West in 1965 on behalf of The Industrial Market Research Limited and the Institute of Marketing. The

sample included a broad spectrum of British industrial enterprises. The findings of this study suggest that an industrial purchase was the result of not one decision, but of many decisions taken by different groups of people, and that the pattern varied according to the nature of the purchase and the nature of the enterprise making the purchase. Within this framework, *the strategic issues in purchasing management for manufacturing enterprises* merits serious attention.

Adopting the same trend of thought Howard (1989:198) contends that industrial marketing firms have realised that their consumer is a *formal department*, and this is making a profound difference in their marketing tasks. Certainly, industrial marketing strategies are being constantly formulated to meet the demands of the formal buying department. Should the buying enterprise be slow in strategy formulation, their role in making the final product a competitive one will be a difficult task. The traditional held view that multiple sourcing increases supply security has been challenged by a trend towards single sourcing. Close supplier relations and co-operation on scheduling and quality assurance systems question the wisdom of the traditional arm's length dealings between the buyer and supplier. Negotiation is receiving increasing emphasis as opposed to competitive bidding and longer term contracts are replacing short term buying practices and techniques. Another development associated with the growth of microcomputer usage in purchasing is the capability of direct electronic transmission of data and standard business forms between a buying enterprise and its supplier.

Since efficiency in purchasing affords opportunities for making important savings and avoiding serious waste and loss, industrial buyers, irrespective of the size of the enterprise, should be seeking ways to procure materials at the lowest cost consistent with the quality and service required and at the same time, keeping the administrative cost of buying and the cost of holding materials in inventory at cost-effective levels. These considerations underlie the basis of the whole function and science of industrial purchasing.

Another trend that affects small, medium and large industrial enterprises alike, is the

internationalisation of economic activities and markets. A typical illustration is the growing integration of the European Union (EU). The **Single European Act of 1987** provided for the elimination of all remaining barriers to the free movement of capital, goods, services and people across the EU. This in essence suggests that domestic markets are no longer insulated from foreign competitors.

A great deal of research effort has been directed at an attempt to solve the continuing argument as to whether large industrial buyers are rational or irrational. As more and more evidence are provided of both rational and irrational actions, it becomes clear that to progress further, research should be conducted on a broader front moving away from the studies of designated buyers or purchasing personnel, **to the entire process and management of buying and management of materials within the enterprise in the light of the above discussion.**

With the problems which have surfaced globally in the purchasing arena over the past two decades and the growing recognition by top management of the opportunities for attaining greater purchasing leverage over operating results, purchasing managers are moving into the strategy area. The key questions are how can purchasing and materials management contribute to the enterprises objectives and strategy and how industrial marketing enterprises can significantly contribute to the overall success of the buying enterprise and to its own success in a rapidly changing environment? This study, *Strategic issues in purchasing management for manufacturing enterprises*, addresses these questions.

1.4 STATEMENT OF HYPOTHESES

Based on the above discussion the following hypotheses and propositions were generated:

- there is a strong correlation between the degree of importance of current purchasing activities and the degree of emphasis over the following five years;
- amongst industrial buyers there is a high degree of sensitivity to satisfactory product performance and therefore purchase decisions are joint decisions

- involving more than one person in the final decision to initially select a particular product, quality or supplier;
- the partnership affinity between buying and supplying enterprises in small, medium and large enterprises are the same;
 - price is not the most important buying criterion in a partnership relationship;
 - irrespective of the nature of the product in terms of new task, modified rebuy and straight rebuy, trade association as a source of information is highly ranked;
 - sole sourcing is used more extensively by large enterprise as compared to small and medium enterprises;
 - there is a positive correlation between sole sourcing and partnership relationship; and
 - purchasing personnel are extensively engaged in strategic corporate activities.

1.5 METHOD OF STUDY

Prior to the main survey of this study, preliminary discussions were held with industrial buyers and industrial marketers (major suppliers) in KwaZulu Natal. This pilot study, in addition to identifying factors which underlie market behaviour, evaluated relationships and interactions between buyers and marketing enterprises (suppliers). This initial survey was based upon the fact that there are people in industrial enterprises known to be well informed and possess sound knowledge of the buying and marketing environment and preliminary discussions with them presented invaluable insight in the construction of the questionnaire which was used in the main survey. Discussions were also held with members of the KwaZulu-Natal and Zululand regional branches of the Institute of Purchasing in South Africa.

Following on the preliminary discussions with industrial buyers and marketers, a preliminary questionnaire was constructed. The questionnaire examined how the buying department influences the actual individual buying decision. Based on the pilot survey, a revised questionnaire was finalised for the main survey which conducted by means of personal interviews and mail survey during November 1996 - April 1997.

1.6 SAMPLING METHOD USED IN THE STUDY

Since sampling is obtaining information from a portion of a larger population or universe, it aims at getting information which can be regarded as representative of the whole. This representation implies possession of the essential characteristics of the whole. The ideal sample is a random probability sample. This requires a very adequate population list or framework from which to sample. Whilst such a list is available in the form of business telephone and facsimile directories and registers compiled by institutions like the Chamber of Commerce and Yellow Pages, it needs to be pointed out that an ideal sample may not be generated due to the nature, magnitude and diversity of the industrial enterprises. The resultant sample might well be so widely spread geographically that it would make interviewing difficult and at an exorbitant cost.

In conducting this study, quota sampling method was used. In general statisticians have criticised the method for its theoretical weakness, however, market researchers have defended it for its inexpensiveness and administrative convenience. Intercontinental Marketing Services of Africa who conducted the fieldwork, classification of answers and computer processing for the studies of the Buthelezi Commission into the requirements for stability and development in KwaZulu and Natal argues that while an ideal sample is a random probability sample, the results of a quota sample approximate very closely to random sampling. In order to improve the quality of the sample, strict quota controls were implemented. Stratification factors which are important to the subject of the survey were identified and implemented. For the purposes of this study a quota sample of 150 respondents was considered adequate.

1.7 SCOPE AND LIMITATIONS OF THE STUDY

The scope of this research is limited in at least four respects. In the first instance, the subjects included represent a non-probability sample of industrial enterprises. However, KwaZulu Natal is of a highly industrialised nature and a fairly good cross-

section of industrial enterprises was obtained. The primary caution exercised in this regard is to generalise the results of this study to the entire population of industrial buyers.

A second limitation centres around the fact that the primary sampling units were industrial buyers with the title of purchasing managers, buyers or purchasing personnel. While these people exercise a great deal of authority and responsibility within the enterprise, it would be unrealistic to fail to recognise that other parties are influential in the purchasing process. However, from the perspective of manageability and accessibility, the designation of purchasing manager, buyers or purchasing personnel as primary sampling unit can be justified.

A third area of concern is the use of self-reported measures. Ideally, this study should have been conducted by observation. Time constraints both on the part of the researcher and respondents precludes this type of research design.

Finally, this study does not attempt to build a normative model of strategic issues but rather the goal is a positive descriptive analysis providing insight into strategic issues.

1.8 CHAPTER OUTLINE

The study is divided into three parts; Part A, Part B and Part C. Part A, presents an **overview and orientation of strategic issues in purchasing in manufacturing enterprises** and consists of Chapter One which deals specifically with the introduction and orientation of the study.

Part B deals with **managerial planning in purchasing and materials management** and consists of six chapters. This part addresses the management and control of purchasing and materials systems to achieve internal and external customer satisfaction. The strategic role of purchasing and materials management is critically examined in this Chapter Two. This conceptual chapter, firstly addresses the key strategic issues and options that confront the purchasing and materials management

function. Secondly, it focuses on the possible integration of the purchasing and materials management function into the overall business strategy. It considers the strategic role of purchasing function. In addition it considers purchasing competencies, strategies and tactics. Furthermore, it details purchasing literature in order to provide a platform for the study.

The sole intention of Chapter Three is to place in perspective the purchasing product as a strategic variable. This chapter examines the purchasing product as a strategic variable within a rapidly changing competitive environment. Strategic purchasing can play a crucial role in aiding product development activities and enhance the enterprise's competitive advantage. In its relentless pursuit to achieve sustainable competitive advantage, this chapter views the purchasing product as a strategic weapon.

Likewise, it is imperative to examine the role of suppliers as a strategic variable, the management of suppliers and the nature of supplier relations within the context of achieving competitive advantage. The nature of buyer and supplier relationships is undergoing dramatic changes. Chapter Four considers the new initiatives in buyer-supplier relationships in an effort to reconcile the needs of quality, cost reduction, innovation and ultimately customer satisfaction.

By way of summary, Chapter Five considers the future role of purchasing. In addition, it concentrates on those major changes in the purchasing paradigm that may unfold in the years ahead, such as integrated supplier relations, team purchasing, supply management alliances, supplier managed inventories, internet purchasing and supply chain management. The purpose of this chapter is to generate some further strategic issues that should be considered for the empirical study. Rather than to describe the problems of industrial purchasing management, this chapter further stresses what is new and defines the direction in which the field is developing, both in theory and practice. Chapter Six introduces the methodological procedures in obtaining empirical data and Chapter Seven gives the empirical findings.

Finally, Part C presents the conclusion and recommendations of the study and contains one chapter, namely Chapter Eight.

PART B

STRATEGIC PLANNING IN PURCHASING AND MATERIALS MANAGEMENT IN INDUSTRIAL ENTERPRISES

The awareness that the wide spectrum of varied activities of the purchasing and materials management function has become important in the strategic framework of major industrial enterprises, presents an opportunity for researchers to investigate these activities from a practical and strategic viewpoint and its applicability to other small and medium industries. Developing from almost clerical functions to major strategic management functions, purchasing and materials management presents ideal opportunities for industrial enterprises to meet their aims and objectives efficiently and effectively.

Over the past years the gradual emergence of the buying function from a position of "corporate obscurity" within the enterprise to a role as a more active, more valuable member of management has been witnessed. Slowly, and in some cases hesitantly, managers have acknowledged that in a cost competitive environment it would be prudent to develop purchasing's profit generating potential. Rather than view purchasing as a cash drain where all that could be achieved is cost savings, research should be conducted into purchasing's overall responsibility for the enterprise's profitability. It should not be ignored that some gains were made when purchasing personnel were becoming corporate officers and materials management was seen as a way to integrate purchasing within the business infrastructure.

During the 1980's management gave way to strategic planning and management in every sector embraced its tenets and principles as the guiding beacon that would help South African industrial enterprises plot its course through the turbulent times that lay ahead. Indeed, for the past several years the philosophy of strategic planning has been in its ascendancy. Through to

the next century it is anticipated that there will be even a greater demand placed on the strategic planning process. Although entrenched deeply in the minds of management and market planners, the principles and practices of strategic planning have been slow to diffuse through the purchasing function. American research findings have spoken about the need to integrate more fully purchasing into the enterprise's strategic planning programme. A number of compelling arguments can be generated to build a case for incorporating purchasing related information into a enterprise's long range plans.

Strategic planning process traditionally has been market driven. The planning cycle would begin with product-market decisions and work backwards. Implicit in this approach are the assumptions of rapidly expanding markets and limitless resources and sources of supply. Recent economic events invalidate these assumptions and make such unidimensional market driven approaches to planning both anachronistic and managerially unwise. The point is that effective strategic planning requires environmental links both at the supply input side and the market output side. Thus successful strategic planning necessitates that purchasing managers begin to forge a link between supply and market factors and attempt to deal more effectively with how the enterprise relates to its external environment. The profit generating potential is no longer at question. Concern centres on purchasing's ability to contribute meaningfully to the strategic planning process.

Normative approaches to planning emphasises the importance of opening dialogue between purchasing management and business planners. In practice this dialogue is rare and the conversations, when they do occur are often brief. In some enterprises, this silence exists because strategic planners tend not to listen to purchasing people. One need only consult the popular management texts dealing with strategic planning and management to find topics devoted to purchasing related strategic decisions are notably absent. For other enterprises an interchange between two departments is missing because purchasing management tends not to think strategically.

The concept of strategic planning, as presented here, extends to those business actions and responses that match the enterprise with its environment and corrects the mismatch between the two. From the perspective of the purchasing management it is important to recognise that effective strategic purchasing can have a profound impact on an enterprise's competitive stance in the market place. Purchasing is forced to look beyond the traditional cost reduction activities associated typically with the purchasing function and, instead, must begin to ask how the purchasing related activities/information link with the enterprise's goals and are consistent with and support the enterprise's competitive performance.

The thrust of this part of the study centres on issues applicable to strategic purchasing and how these issues affect purchasing performance. In recent years a great deal has been written about how to improve purchasing performance. Interestingly, greater emphasis has been placed on improving efficiency which implies a focus on short run, day-to-day tactical decisions. As a result, not enough attention has been given to improving purchasing effectiveness which encompasses those more long range, strategic purchasing decisions weaving the enterprise's goals to purchasing decisions.

Part B contains six chapters. The first chapter of this part (**Chapter Two**) considers the challenges of strategic purchasing and materials management. The strategic role of purchasing and materials management is critically examined and this chapter considers the strategic location of purchasing and materials management in manufacturing enterprises. The second chapter (**Chapter Three**) in this part is devoted to the understanding of the industrial product as a strategic variable which presents a framework for the analysis and findings of the empirical study. It considers purchasing and innovation and purchasing under changing product and market conditions. The third chapter (**Chapter Four**) considers suppliers as strategic variables. This chapter identifies the interacting variables that influence a purchase decision and decisions affecting materials. The fourth chapter (**Chapter Five**) in this

part is a summary that targets purchasing for profitability and competitive advantage. The fifth chapter in this part (**Chapter Six**) presents the methodological procedures in obtaining empirical data for this study. The final chapter (**Chapter Seven**) presents the empirical findings of this study.

This part also seeks to heighten understanding on the part of the industrial marketer of the purchasing process in general and suggests specific areas and opportunities for improving purchasing's performance and effectiveness.

CHAPTER TWO

THE CHALLENGES OF STRATEGIC PURCHASING AND MATERIALS MANAGEMENT

2.1 INTRODUCTION

It was noted in the previous part that the purchasing and materials management function has been changing in many industrial enterprises and that this is reflected in the increased attention this discipline is receiving from managers and practitioners. Considering the amount of money generally involved in the preparation and execution of purchasing decisions, this is not so strange, more so the present competitive position of industrial enterprises is under great pressure. Enterprises are finding it increasingly difficult to maintain their market position due to increasing cost structures.

Apart from immediate savings on purchasing prices, the purchasing function can also contribute to the improvement of the enterprise's competitive position in a more indirect manner. This indirect contribution can assume the shape of standardisation of product assortment, reduction of inventory, product and process innovation, reduction of quality costs (costs associated with inspection, rejection, and repairs) and cutting down on production times. In practice, these indirect contributions often turn out to be more substantial than the amounts of money which are saved directly and exclusively by purchasing.

In this light, the strategic role of purchasing and materials management is critically examined in this chapter. This chapter, firstly addresses the key strategic issues and options that confront the purchasing and materials management function. Secondly, it focuses on the possible integration of the purchasing and materials management function into the overall business strategy. Finally, it considers the strategic role of purchasing function.

2.2 THE CONCEPT OF STRATEGIC PURCHASING

Recent writers have produced a variety of definitions of strategic purchasing, reflecting in many cases significantly similar approaches to the subject. Erwee (1996:75-77) contends that enterprises today are faced with ever increasing competition and must constantly adapt to changes in marketplace regulations/deregulations, globalization, advancing customer focused technology and services, growing quality requirements and constant cost improvement pressures. Strategically managing purchased goods and services positions an enterprise to turn these changes into a competitive advantage by leveraging the enterprise's buying power and maximizing the contribution of the supply base through aligned interests. Several other authors, among whom one can include Sysons (1992), Carter and Narasimhan (1995), Hendrick and Ellram (1993), Monczka and Trent (1993) and Hugo, Van Rooyen and Badenhorst (1997), maintain that there certainly exists an opportunity for the purchasing department to stand out as a strategic leader, and offer specific plans on how strategic management of purchased goods and services can contribute to the enterprise's objectives. To do so, they must clearly understand what is meant by strategic purchasing and define their role in the change effort. They must also have a plan for implementation of the change throughout the enterprise.

According to Ellram (1995b:441-454) strategic purchasing involves segmenting purchased goods and services into commodity groupings and developing short and long term business plans for key groupings. These business plans are focused on reducing total cost and maximizing the contribution towards company business objectives. This approach may require enterprises to move away from the functional and transactional focused purchasing practices and move towards a horizontal, process approach to purchasing requiring:

- linkage to the objectives of the enterprise;
- industrial market intelligence;
- total cost decision making;
- cross functional input;
- smaller, more integrated supply base;

management of the entire supply chain; and
customer focus.

In addition, Hendrick and Ellram (1993:3-12) maintain that this process approach causes a shift in purchasing philosophy from low price buying to total cost management. With the advent of process re-engineering, many enterprises have begun to regard their business as a number of different processes, that cross several departments and result in producing the product or service their company ultimately sells. Current thinking recognizes the supply process as one of these many business processes. This changes the perspective of purchasing from that of managing a transaction, to that of managing the cost of an entire business process - the process that starts with design of the product or service and ends with the ultimate disposal of the product or completion of the service. This also changes the definition of total cost to being all the cost components associated with a supply process for a product from design to disposal. Addressing the issue of total cost of ownership as a new perspective on managing the supply chain, Hugo (1997:208) contends that "*total cost of ownership and supply chain management are separate and independent strategies which can be implemented separately. However, it is the symbiotic relationship between these two concepts and the implementation of both as integrated systems of supply management where major benefits can be obtained.*"

The objective of strategic purchasing, then, is to identify key commodity groupings for the enterprise and create business plans for each grouping that focus on reducing total cost and maximizing the value of this entire supply process. Enterprises should therefore recognize that the importance of strategically managing cost to increase profitability. In this regard Russil (1997:9) asserts that the purchasing department is best positioned within the enterprise to lead this effort since they are generally viewed as the entry point for supplier inputs into the enterprise. Marketplace intelligence, supplier relationship management and risk management are all necessary skills and knowledge that the purchasing professional can employ towards leading the change. Not doing so will put the purchasing department and profession at risk of being downsized or outsourced.

2.3 STRATEGIC MANAGEMENT FOR COMPETITIVE ADVANTAGE

A useful point of departure is to consider the term **strategic management**. A philosophical definition of strategic management is presented by Rossouw (1997:295). He defines it as "*the process of formulating and implementing strategies in response to the changed environment so as to ensure the survival and success of the organisation. Strategic management and management of change are therefore interdependent. Strategic management brings about the change in the external and internal environment to the organisation, and the change is managed through management of change.*" Gluck, Kaufman and Walleck (1988:154) define strategic management as "*a system of corporate values, planning capabilities, or organisational responsibilities that couple strategic thinking with operational decision making at all levels and across all functional lines of authority in a corporation.*" It is this type of process (**Rossouw**) or system (**Gluck, Kaufman and Walleck**) that enables a large enterprise to capitalise on its innovation and outpace its competition.

Business strategy is concerned primarily to understand what makes an enterprise effective in its environment (**competitive**), and to explore the organisational process required to enhance this effectiveness (**competitiveness**). Strategic management is frequently seen as a process or system of adapting the pattern performed by the enterprise to the external environmental conditions in which it operates. The idea of "fit" between the enterprise and the environment is a central theme in strategic management. Generally, to manage strategically means to manage a process whereby a desired pattern of activities to be performed by the organisation is conceived (**formulation**) and the task of management is to create the conditions necessary to ensure that these activities are carried out (**develop capabilities for distinct competitive advantage**).

Van Weele (1994:115) contends that: "*every company's goal is to develop a sustainable competitive advantage. Only then will the company be able to guarantee its long-term survival.*" He further points out that: "*the ultimate competitive*

position of a company is thus a result of the company's position relative to its major customers, the main and lasting differences in the so called key success factors of the company's direct and indirect competitors, the company's relative performance compared to its main suppliers."

Although the term strategy is a very broad concept and has many different meanings, several authors amongst whom one can include; Kotze and Kotze (1997), Chisnall (1995), Erwee (1996) and Miner (1990), agree that business strategy refers to the pattern of decisions in an enterprise that:

determines and reveals its goals and objectives;

produces the principal policies and plans for achieving the goals and objectives; and

defines the range of business the enterprise is to pursue, the kind of economic and human organisation it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers and communities.

In the centre of business strategy is the enterprise's competitive strategy which is a combination of the goals for which the enterprise is striving and the means by which it will compete in the market place. Consistent with this, the purchasing strategy can be viewed as a pattern of decisions related to acquiring required materials and services to support operations activities that are consistent with the overall business competitive strategy. In the process of formulating business competitive strategy, an enterprise must first assess the internal and external factors that influence the enterprise's potential success in the market.

The internal factors include the enterprise's relative strength and weaknesses in terms of the capabilities of its functional areas and the personal values of the key personnel involved. These internal and external assessment results do not only provide the enterprise with the basic direction of its competitive strategy as well as the focus of any future developmental efforts or programmes, but also the enterprise's business competitive strategy is formulated to highlight the perceived competitive advantage

over its competitors. At the same time, the enterprise frequently designs and directs improvement programmes to remedy any perceived weaknesses in terms of functional area capabilities (example purchasing's) that are necessary to successfully execute the strategy. In this regard Watts, Kim and Hahn (1992:5) assert that purchasing is often called in as a last resort to remedy the perceived weaknesses in the enterprise's internal manufacturing capabilities. Traditional and bureaucratic enterprise do not immediately see the contribution of purchasing.

Addressing the issue of purchasing's contribution to the competitive strategies of the enterprise, Reck and Long (1988:2-8) who conducted case studies of 15 industrial enterprises suggest four stages of development that the purchasing function passes through to become "... *a competitive weapon in the battle for markets.*" These stages are depicted in Table 2.1.

TABLE 2.1

RECK AND LONG'S FOUR STAGES OF PURCHASING DEVELOPMENT

STAGES	NATURE OF THE STAGES
STAGE ONE (PASSIVE STAGE)	In this stage, purchasing normally begins as a reactor to requests from user departments. Many of purchasing's legitimate activities are handled by other functions outside of purchasing.
STAGE TWO (INDEPENDENT STAGE)	Purchasing departments spend considerable time attempting to professionalise the purchasing function by introducing computerised systems, formalised supplier programmes and communication links with technical functions.
STAGE THREE (SUPPORTIVE STAGE)	Purchasing departments are viewed by top management as essential business functions. Purchasing is expected to support and strengthen the enterprise's competitive advantage by providing timely information to all departments in the enterprise about potential changes in the price and availability of materials which may impact on the enterprise's strategic goals.
STAGE FOUR (INTEGRATIVE STAGE)	The enterprise's success rests significantly on the capabilities of the purchasing department's personnel. Purchasing's role within the enterprise changes from facilitator to functional peer. This development process is implemented and guided by management over a period of time.

SOURCE: Reck R F and Long B G (1988), "Purchasing: A Competitive Weapon," *Journal of Purchasing and Materials Management*, vol. 24, no.3., p 2-8.

Consistent with the findings of Reck and Long (1988) and by studying 142 industrial purchasing departments in the United States and Canada during 1987 and 1988, Gluck, Kaufman and Walleck (1988:154-161) determined that most enterprises also follow a standard path in their evolution to strategic management. This path can also be segmented into four sequential planning phases:

- basic financial planning phase;
- forecast-based planning phase;
- external oriented planning phase; and
- strategic management phase.

Cammish and Keough (1991:8) present a comparative purchasing developmental model with four developmental stages corresponding to that of Gluck, Kaufman and Walleck (1988) and Reck and Long (1988). Cammish and Keough utilise the following terms to refer to the stages:

- service functioning for manufacturing stage;
- low unit cost stage;
- co-ordinated purchasing stage; and
- strategic purchasing stage.

Van Weele (1994:90) also suggests four different ways that the purchasing function may be viewed. He uses the following concepts to describe each orientation:

- Administrative orientation;
- The commercial orientation;
- The logistic orientation; and
- The strategic orientation.

The model presented by Van Weele (1994:90) is consistent with those of the previous authors cited above. It is not an intention to discuss each and every orientation or phase. However, a **summary** of some the findings of authors cited above are presented in Table 2.2 on the following page. The various descriptions of the four stages are given and ten attributes of the purchasing function are further identified in Table 2.2. The purchasing emphases throughout the range of strategic settings are tabulated for each of the ten purchasing attributes.

TABLE 2.2
SUMMARY: PURCHASING EMPHASES AND PHASES IN STRATEGIC SETTINGS

Purchasing Attributes	STAGE 1	STAGE 2	STAGE 3	STAGE 4
Terms used by the various authors to describe the stages.	Basic financial phase; Service functioning for manufacturing stage; Administrative orientation.	Forecast-based planning phase; Low unit cost stage; Commercial orientation.	Externally oriented planning phase; Co-ordinated purchasing stage; Logistic orientation.	Strategic management phase; strategic purchasing stage; Strategic orientation.
Attribute 1 : Concept of the field	Buying	Purchasing	Procurement	Supply
Attribute 2 : Concept of strategy	Better price on the next buy	Maintain favourable price/cost variances	Support line of business	Entrepreneurial team member
Attribute 3 : Expectations	Minimisation of costs	Cost minimisation, cost avoidance, cost reduction, purchase for quality	Contributions through value analysis, value engineering	Involved in product development and line of business management, Line of business results
Attribute 4 : Management approach	Reactive	Reactive but plan for future	Fit department in with plans of the rest of the enterprise	Positive pro-active
Attribute 5 : Major activities	Process requisitions into purchase orders and contracts	Management of the buying function - make process efficient	Fit buying cycle to the line of business - product cycle	Manage commercial relationships for the enterprise, source for long term
Attribute 6 : Range of products	MRO items and office goods	Raw materials MRO items and office goods	Capital goods, raw materials, MRO items and office goods, outsourcing management	Suggest source enterprise to purchase; suggest product changes in line with market opportunities and future constraints
Attribute 7 : Budgetary approach	Cost centre	Cost centre - plans for future	Supply chain management; shape future of department for line of business	True supply chain management - partner in change
Attribute 8 : Key personal skills	Task oriented	Some management	Managerial, strong interpersonal and strong analytical	Purchasing decisions are business decisions
Attribute 9 : Concerns	Conformance to norms - process problems	Basic managerial issues. Concern with power regarding scope, backdoor buying	Supply chain management	Shape of function is not important, results and output are the keys
Attribute 10 : Management style	Clerical/reactive	Managerial forecasting	Managerial planning	Team manager

Source: Adapted from Gluck F W, Kaufman S P, Walleck S (1988), "Strategic Management for competitive advantage," *Harvard Business Review*, July - August 1988, p.154-161.

The next four subsections discuss the four phases of Cammish and Keough (1991:3-20) and Gluck, Kaufman and Walleck (1988:154-161) in greater detail and then explores the characteristics of purchasing departments that are consistent with each phase. Much of the theoretical foundation is found in the work of Gluck, Kaufman and Walleck (1988:154-161). Freeman and Cavinato (1990:7) contend that the model developed by Gluck, Kaufman and Walleck "... *continues to be regarded as the classical analysis of the developmental phases through which an organization progresses as it evolves toward a formal strategic management.*"

2.3.1 Phase one - the basic financial planning phase, service functioning for manufacturing stage or administrative orientation stage

According to the authors Gluck Kaufman and Walleck (1988:154-161), the focus of **phase one** is on operational control with formal planning concentrating on the budgeting process. Revenues and costs are forecasted for the year and performance is evaluated on the variance of actual and budget. The time horizon is short, the focus is within the function, and the overriding objective is to meet budget goals.

The implication of this is that enterprises that are in this planning phase views its purchasing department merely as a buying service within the enterprise. Its purpose is to find ways to buy an item at a lower price than previously, with the overall objective of minimizing costs against budgetary norms. It needs to be noted that the concept of cost in this phase tends to be restricted to out-of-pocket costs and does not include the implicit costs of carrying inventory and quality problems. The perspective of the department is generally reactive, processing requisitions as they are received from users, conducting bidding activities and writing purchase orders or contracts as necessary. Gluck, Kaufman and Walleck (1988) allude that the system established for phase one purchasing department, fosters reactive-cost minimisation behaviour. Obviously, designed as a cost centre, the personnel may be rewarded for pure cost minimisation and are evaluated in terms of how efficiently they respond to acquisition demands placed on them by users and how well they perform the clerical tasks of processing orders. The challenges are

process oriented, involving how to obtain an item faster, process an order in an expedited manner or solve an immediate user problem. According to the authors, the reactive perspective of phase one forces diverse enterprises to progress to phase two.

2.3.2 Phase two - forecast-based planning phase, low unit cost stage or commercial orientation stage

When an enterprise's purchasing function moves away from phase one, its effort is to plan for future growth. Gluck Kaufman and Walleck (1988) contend that **phase two** is characterised by the use of forecasting models that extrapolate past experience into the future. Planning is conducted largely through a gap analysis procedure. Expected earnings are forecasted, desired earnings are plotted and programmes are developed to rationalise the two. The development of these programmes fosters a process of environmental analysis, long term forecasting and the allocation of limited resources across the various segments of the enterprise.

The implication of this is that enterprises that are in this planning phase tends to use the term purchasing as opposed to buying and strong emphasis is placed on forecasting and price-cost variance responsibilities. In addition to cost minimisation, this phase broadens to include more positive cost reduction and cost avoidance activities. The philosophy of purchasing for quality also emerges. The focus of the purchasing department in this phase still tends to be somewhat reactive. However, in an attempt to become more proactive, it is clear that most departments in this phase work hard to manage the buying function and make the process more efficient. This move towards a proactive, forward looking perspective requires personnel to possess some skills in managing processes and in forecasting. The management of people also begins to become a factor as the function becomes more complex.

Commenting critically on this phase, Freeman and Cavinato (1990:7) assert: "*while generating improvements over phase I, the static focus of the process causes*

problems. Forecasts are produced once a yearly extrapolating historical performance, often not incorporating known future environmental impacts on the business; and once the forecast driven business plan is developed, it cannot be altered until the next planning period." Certainly, these concerns tend to hinder progression to subsequent phases because they often lead to the measurement of development in terms of headcount, budget size and procedures rather than in terms of purchasing innovation.

2.3.3 Phase three - externally oriented planning phase, co-ordinated purchasing stage or logistic orientation

Phase three arises when enterprises realise that the lack of forward perspective is the cause of missed opportunities. The planning procedure becomes more dynamic, constantly scanning the environment and responding to the market place. To facilitate this process, enterprises organise themselves into strategic business units and each business unit develops its own product strategies consistent with the business strategy. By focusing on a limited number of product lines, the management of the strategic business unit can effectively monitor the enterprise, develop and analyse strategic alternatives and maintain a proactive posture.

In this phase, the function is broader and often includes responsibilities for inventories, transportation and seeking sources of supply. The purpose of the function is to support the lines of business and make positive contributions through various types of value analysis. Departmental plans tend to be integrated with those of the rest of the enterprise and the buying cycle is designed to fit the product cycle of the lines of business. The ability to do this successfully is facilitated by the fact that purchasing in this phase often has a full range of commodity responsibilities and can even extend to managing supplier relationships. The department is allowed to pursue profit-seeking ventures through the sale of scrap and surplus materials and through hedging. It can be seen that the department in this phase requires the development of a strong planning perspective and the employment of strong managerial skills, interpersonal, analytical and integrative with respect to other

departments.

Freeman and Cavinato (1990:7) contend that: "*...while the SBU (strategic business unit) structure does foster improved product planning, it does not facilitate business wide opportunities for capitalizing on synergies in areas such as research and development and purchasing. Additionally, by requiring SBU managers to present strategic alternatives to business management, lower management levels typically determine which strategic options will be developed for senior management review each year. This filtering at lower levels can greatly impact the corporation in terms of long term positioning and financial status.*" Certainly, the concerns expressed by Freeman and Cavinato (1990) in terms of lost information and the time delay for strategic alternatives to reach senior management, pushes the enterprise into the next phase of planning.

2.3.4 Phase four - strategic management phase; strategic purchasing stage or strategic orientation

Phase four incorporates the broad concept of supply management. Anything that involves inbound materials or service needs of the enterprise is included within the scope of the department's responsibilities. The vision is extremely broad and purchasing functions as an equal member of an entrepreneurial team responsible for product development and line of business results. Purchasing management is completely proactive, providing strong input to the creation of corporate values and plans. This is an effort to join the strategic planning process with operational decision making. The authors Gluck, Kaufman and Walleck (1988:154-161) point out that three factors impact on the enterprise's ability to accomplish this merger, namely, **the planning framework, the planning process and the corporate value system.**

Within the **planning framework**, Gluck, Kaufman and Walleck (1988:154-161) contend that strategic planning must be conducted on multiple levels. The process begins with product/market planning to set sales levels and prices. This step is

followed with the business unit planning to determine market position, cost structures, shared resource planning to allocate resources across business units in the best interest of the enterprise, shared concern planning to focus on the need of groups of business units or customers and corporate level planning to set directions and appropriately structure the financial and human resources of the enterprise.

The objective of the **planning process** is to foster creativity in an ongoing manner. The approach varies from company to company. In order to succeed in phase four, an enterprise must possess a culture supportive of the strategy planning framework and process. The enterprise must value teamwork, foster an entrepreneurial spirit at all levels and generate a belief that through a successful process of strategic management the enterprise is capable of directing its own future rather than falling victim to changing environmental factors.

According to Freeman and Cavinato (1990:9), in some phase four enterprises, little or no actual purchasing is performed by people in the function. Rather purchasing personnel are the focal point of supply relationships between various engineering and manufacturing people in the enterprise and individuals in different functions within supplier enterprises. Purchasing is considered the co-ordinators of commercial relationships. As such, they are extremely knowledgeable about the supply market. Typically, purchasing is in a position to recommend changes in product or materials in line with market opportunities and constraints. It should be stated that these are prerogatives that are often reserved for marketing and product management, but they also exist in some phase four purchasing groups. As a team member in management activities, a phase four purchasing operation typically is no longer concerned with the department size or reporting line. Evaluation systems are usually structured to foster true supply management and to appraise managerial performance. In fact decisions are always not viewed in a purchasing context, but rather in the context of their impact on the operations of the total enterprise.

It has been clearly illustrated that the structure of the enterprise in which purchasing resides can influence the level of the department's development. Multi-tiered

purchasing organisations often contain mixes of the four phases. A field buying site, having phase one characteristics, may exist in the same enterprise that has a strong central purchasing group that performs at high level planning, is involved in supplier selection and is fully integrated into product planning and performance. In a decentralised, strategic business unit or department, the enterprise as a whole may be operating in a phase three mode. However, if strong financial orientation exists within the department, the purchasing activity may portray signs of phase one or phase two.

Finally, to be regarded as an equal contributor to the strategy and success of an enterprise, purchasing must develop in congruence with the rest of the enterprise as it evolves along a path to strategic management. Failure to do so not only relegates the purchasing function to a lesser status in the enterprise, it also deprives the enterprise of the strategic contributions that can be made by purchasing. The strategic purchasing operation tailors its activities, its management approaches, its budgetary structures and its personnel skills to the needs of the total enterprise. Movement up the continuum of growth and development phases requires careful examination of current practices in the light of what is applicable at each successive stage. Every activity and philosophy must be reviewed in terms of its ability to support the business planning framework, the business planning process and the corporate value system.

2.4 HISTORICAL OVERVIEW OF STRATEGIC PURCHASING

From the preceding literature survey, it can be observed that the movement of purchasing from a passive or reactive role to a strategic role is a widely discussed aspect of purchasing strategy. According to Ellram and Carr (1994:11), *"Recognition of the purchasing function's evolving role in corporate strategy is rooted in part in the field of marketing - specifically in investigation of industrial buying behaviour."* This view supports the conviction held by several authors, among whom one could include Ammer (1974) Farmer, (1978) Porter (1975) and Spekman (1985). However, Ammer (1974:36) noted that top management viewed

purchasing as having a passive role in the enterprise. The purchasing function was described as an administrative rather than a strategic function. Basing their research findings on this assumption, Spekman and Hill (1980:3) determined whether purchasing personnel higher in the purchasing hierarchy search for, acquire and process relevant information differently from those lower in the hierarchy. Spekman and Hill (1980:3) show that there is no significant difference in the degree to which personnel at high and low levels in the purchasing function are involved in day to day operational purchasing related activities. The findings suggest that higher level purchasing personnel do not spend enough time on important strategic issues.

Farmer (1981:20-24) found that few enterprises allow the purchasing function to make significant contribution to strategy development. The main reasons for this stems from the fact that purchasing personnel in many enterprises perform clerically oriented functions. They do not strive for inclusion in strategic planning and management. Van Weele (1984:16-22) found that management's regard for purchasing varies from low level clerical function to a high level strategic function. In this regard Van Weele (1984:17) concludes: "*firm's that consider purchasing as a strategic business area frequently do so because of external factors, such as long term availability, reliability and price problems in the supply markets.*" In addition there are internal factors that influence the perception of purchasing, namely, management style, the depth of purchasing's responsibility, internal politics, the distribution of power and the enterprises' competitiveness.

Spekman (1985:94-99) discusses two types of strategic planning in detail, namely, strategic resource planning and strategic purchasing planning:

firstly, **strategic resource planning** requires that strategic resources be tied to the enterprise's product-market decisions. The strategic resource planning is completed after the gap is bridged between strategic resource factors and product-market considerations. In this regard Spekman (1985:96) maintains: "*The manager is compelled to focus attention to the supply side of the planning process and develop a strategic procurement orientation*";

secondly, **strategic purchasing planning** which involves three strategies, namely:

performance related strategies which include managing purchasing resources, controlling expenses and serving user needs within the enterprise;

purchasing system related strategies include establishing information linkages between the enterprise and the external environment; and

competitive purchasing strategies which focus on the buyer's bargaining power which allows buyers to leverage purchasing and improve the enterprise's competitive market position.

Spekman (1985:99) concludes by stating that "*... corporate managers can no longer afford to develop strategic alternatives that are based primarily on product-market considerations, supply issues must be considered and purchasing strategies must conform to the strategic plans of the enterprise and reflect considerations for enterprise's present and future competitive posture.*"

Consequently, the strategic importance of the supplier and the enterprise as a buying entity began receiving recognition in the mainstream strategy literature. The 1980s was a period of shifting attitudes towards purchasing's role in business strategy.

The research focus during the 1990s appears to have shifted towards integration and the means by which the purchasing function can work to become recognised as a more significant contributor to the enterprise's success. Pearson and Gritzmacher (1990:91-99) provide a comparison between a purchasing function that is capable of contributing to a enterprise's strategic plan and one that is relatively ineffective. An increased level of sophistication within the purchasing function enables an enterprise to fully integrate purchasing into the business strategy. The authors emphasise that the role of purchasing in strategic management is to monitor the supply environment while developing purchasing management personnel from technicians to strategic decision makers that influence competitive position and make better purchase decisions.

In examining issues related to the expanding role of the purchasing function in the strategic planning process, Monczka (1992:2) asserts that purchasing can influence the competitive factors of quality, cost, delivery reliability, cycle time reduction by developing "*optimal material specifications, monitor and forecast changes in external source markets, share information with suppliers, identify critical materials and substitutes, identify key suppliers that can support product design, and develop material sourcing and contingency plans to support new product introduction.*"

Finally, in this regard Freeman and Cavinato (1990:7) point out "*that purchasing's role, capabilities, and resulting organization must be congruent with the evolution of the enterprise itself. If not, purchasing can become extremely vulnerable during periods of downsizing and reorganization, since only those functions that are perceived to contribute significantly to the welfare of the firm stand to remain intact.*"

2.5 PURCHASING'S STRATEGIC ISSUES

The topic of purchasing strategies addresses the major strategic issues and choices that face the purchasing function. The questions that need to be addressed are:

What are the planned approaches the purchasing function uses to perform its duties? and

What are the impact of these strategies on other functional areas?

In addressing these questions, a brief historical survey of the literature will be made.

Kiser (1976:3-7) presents a conceptual framework to support his belief that industrial purchasing strategy is influenced by two strategic choices. The first choice focuses on which **supplier markets** to enter when making a purchase decision. The second choice deals with **the product or component** level at which the enterprise elects to buy an item rather than make it. According to Kiser (1976), these two choices invariably has an impact on the conceptualising of the **product**, the choice of the market to enter (supplier selection) to purchase materials to produce the **product**, the **product strategy** within the relevant market, and the consumption system of the

product.

Kiser (1976) further suggests that buyers can choose between types of suppliers in two market segments, namely, **horizontal and vertical market segments**. In the **horizontal** market segment, the industrial buyer uses the supplier's technology to reduce the enterprise's manufacturing costs or otherwise improve its performance. In the **vertical** market segment suppliers co-operate with the buyer's efforts to organise the market to the enterprise's advantage. This deals with identifying suppliers in the vertical market segment based on the level or stage of production in which the enterprise has decided to engage.

Jain and Laric's (1979:2-7) conceptual framework for selecting a purchasing strategy focus on the **cost (price)** of purchased materials and the constraints of material costs on the enterprise's pricing strategy. Therefore the purchasing strategy presented by Jain and Laric (1979) is to keep costs low enough to be compatible with marketing **pricing** strategies. Buyers must be aware that input prices impact the level of quality and the design of the enterprise's final product.

The model presented by Jain and Laric (1979), which one can consider highly prescriptive, formulates four different strategies for the industrial buyer: negotiated strategy, dictatorial strategy, defensive strategy and gamesmanship strategy. **The negotiated strategy** deals with the ability of the buyer to negotiate around issues germane to purchasing. **The dictatorial**, sometimes called the offensive strategy, encompass a display of attitude consistent with threats. **The defensive strategy** involves an attitude of non-co-operation by buyers who do not swallow all that is offered by the supplier. Finally, **the gamesmanship strategy** considers the business environment, the sellers growth prospects, technological changes, economic activity levels and competitors clout. Jain and Laric (1979) urge more purchasing involvement in strategic decisions regarding **price determination**. They strongly believed that the purchasing function's importance increased when marketing practitioners were concerned about external forces such as **costs and inputs**.

Hahn, Kim and Kim (1986:2) present another conceptual strategic purchasing model that encourages **competition among suppliers**. The rationale for this strategy of inducing competition among suppliers is to guarantee a constant supply of materials while exploiting the benefits of competition in the market. Multiple sourcing, short term contracting and competitive bidding are the most common purchasing strategies used to promote competition among suppliers. Unfortunately, the use of this type of strategy eventually results in uncertainty among suppliers, which in turn increases the supplier's operating costs. It is this uncertainty among suppliers, concerning demand and market conditions that causes inefficiency and results in higher long term costs for buyers. This strategy of creating **supplier competition** should change because it is contrary to the enterprise's long term profitability.

Watts, Kim and Hahn (1992:2-8) developed a further conceptual model for **connecting purchasing to the enterprise's competitive strategy and to the strategies of other functions**. Ellram and Carr (1994:12) argue that this model is *"... based on a synthesis of prior purchasing management research that in the aggregate found that the potential value of the purchasing function has not been fully recognised."* Watts, Kim and Hahn (1992) focus on the impact of the buyer-supplier relationship in elevating purchasing's role in **business strategy**. Utilising two categories of adversarial relationships and two categories of co-operative relationships, Watts, Kim and Hahn (1992) present a model for the buyer-supplier relationship.

The fundamental argument is that linking purchasing to business strategy requires a new partnership-like relationship with suppliers that is characterised by a strategic emphasis, single sourcing and continuous improvement in cost, quality, service and flexibility. In essence purchasing strategy must be supportive of the overall functional strategy. This strategy can only achieve success if management acknowledges the vital role purchasing is capable of playing in developing a competitive advantage for the enterprise. Table 2.3 summarises the literature survey of this section.

TABLE 2.3
LITERATURE: SUMMARY OF PURCHASING STRATEGIC ISSUES

AUTHOR(S)	FOCUS	FINDINGS
Kiser (1976)	What type of supplier market the buyer wishes to enter and what product or component the buyer needs?	Purchasing strategy is influenced by the type of buyer and supplier markets. Buyers can choose between types of suppliers in two market segments.
Jain and Laric (1979)	What are the cost of purchased materials and the constraint of materials costs on the pricing strategy?	Purchasing is important to the achievement of marketing strategy.
Hahn, Kim and Kim (1986)	What purchasing strategy will encourage competition among suppliers?	The promotion of competition among suppliers does not necessarily lead to lower costs of inputs to production.
Watts, Kim and Hahn (1992)	What is the impact of the buyer-supplier relationship in elevating purchasing's role in business strategy.	Improved buyer-seller relationships can benefit the business strategy.

2.6 DEVELOPING A STRATEGIC APPROACH TO PURCHASE PLANNING

At the core of any strategic plan is the entrepreneurs ability to extend his view beyond the boundary of his enterprise, away from those events and factors that are immediately controllable, to those less predictable and more distant. Given that the environment presents the set of constraints and contingencies over which the enterprise has little control but which impacts on the enterprise's ability to function successfully, it is quite understandable why environmental analysis is a key component of the strategic planning process. Once critical environmental factors are isolated can the extent of business vulnerability or opportunity be understood. An assessment of relevant environmental factors is only part of the monitoring process.

Each factor is thereafter considered in terms of strategic impact. Throughout the entire process one of the objectives is to narrow the list of environmental factors to those that are perceived to impact most seriously on the enterprise's strategic purchasing posture.

Adamson (1991:10) asserts that "*there has been a perception in American industry that procurement and supply issues were rarely strategic in nature, that purchasing involved only short range decisions and that purchasing function couldn't or didn't need to be involved in corporate planning.*" Material supply involves all the classic elements of strategic considerations, namely risk involved, consideration of the enterprise's external environment, risk of key resources and significant opportunities for change. In this light Adamson (1991) builds a link between purchasing and strategic planning and attempts implicitly to reserve a place for purchasing within the business planning infrastructure.

2.7 INTEGRATING PURCHASING STRATEGY WITH BUSINESS STRATEGY

Purchasing's role in supporting an enterprise's competitive strategy should explore the broad issue of communicating and integrating purchasing strategy into business strategy. Caddick and Dale (1987:5-16) present a study that explores how business, marketing, purchasing and other strategies are influenced by the introduction of a sourcing policy. Caddick and Dale (1987:13) observed that purchasing decisions are frequently made without complete information and "*without clearly stated purchasing objectives and strategy, the interlinking of purchasing with both corporate and other objectives and strategies is not possible.*"

Spekman (1981:3-9) calls for fully integrating the purchasing function into the enterprise's strategic planning process. Spekman makes a strong case for purchasing managers to initiate a link between buyers and suppliers as part of their purchasing strategy. However, Carlson (1990:15-19) who employed case studies to focus on purchasing's support of business strategy and long term strategic plans, asserts that the purchasing function must develop and implement strategic planning more effectively at the departmental level.

In formulating a conceptual framework to provide a structural model of strategic planning, Browning, Zabriskie and Heullmantel (1983:19-24) found that supply related considerations were recognised as necessary inputs to business planning

activities. Purchasing's contribution to strategic planning include the following: monitoring and interpreting supply market trends, identifying the materials and services required to support strategic business unit strategies and the strategies of the enterprise and finally formulating supply selection strategies. One conclusion that can be drawn from this study is that strategic planning skills are necessary for efficient and effective purchasing personnel.

According to Burt and Soukup (1985:90-96) purchasing must be integrated into the process and strategy of developing new products. In utilising a conceptual framework to demonstrate that purchasing can no longer be effective under the outmoded traditional view of new product development. In their opinion, today's environment necessitates that product development be a co-ordinated effort among the developers, the buyers and the suppliers. Certainly, when purchasing is involved in the design process, enterprise's invariably experience a reduction in interruptions during the production process and expect a lower overall cost of materials purchased for production. Burt and Soukup (1985:95) add: "*that the most vulnerable aspect of the product development system in many companies is their failure to use full creative capabilities of potential suppliers.*"

The purchasing function can play an instrumental role in supporting the enterprise's strategic positioning. The purchasing department can use co-operative buyer-seller relationships to support the buying enterprise's strategy of product differentiation, cost leadership or market segmentation. Such co-operation enables purchasing to work closely with suppliers to focus on those aspects of performance that are most important to the success of the enterprise.

Finally, long term planning identifies objectives that allow for the formulation of strategies to allocate resources efficiently. As a result, the enterprise realises improvements in the short term while working to support long term goals. Such positive results are possible only if the purchasing function is supportive of and sensitive to the long term business goals.

From the research data presented above, the primary business objective should be the integration of the purchasing function and business strategy. Enterprises that successfully integrate purchasing strategy with business and other functional strategies are in a position to realise the performance benefits that a progressive purchasing function offers. There are a number of features that characterise an integrated purchasing function. Firstly, management can measure purchasing performance in terms of contribution to the success of enterprise rather than basing performance on limited functional efficiency measures. Secondly, the purchasing department in actively supporting the objectives of the enterprise provides a major contribution to the enterprise's competitive success. Thirdly, there exists an open channel of communication among purchasing, other functional managers and top management.

2.8 PURCHASING STRATEGIES AND TACTICAL POLICIES

Once the basic purchasing strategies are defined and the priorities are established, the next step for purchasing management is to formulate specific operating policies and plans, largely tactical in nature, to support the basic strategies. These tactical considerations typically address the day to day issues and problems, such as selecting sources of supply, determining the number of suppliers (single or multiple sources), making decisions about foreign buying, developing negotiation plans and conducting make or buy analysis. In all these cases, the tactical policies must be consistent with the basic purchasing strategies. If the tactical or operational policies and plans are developed independently of the basic strategies, they may conflict with the basic corporate competitive strategy.

Having established that the purchasing and materials function is an important contributor to the strategic success of the enterprise, it becomes imperative to examine purchasing strategies and tactical policies. Authors such as Doyle (1989:46-48), Adamson (1991:1991:10-11) and Russil (1997) discuss the concept of purchasing strategy. Based upon the contribution of these authors, four distinct types of purchasing strategy can be identified. These include:

firstly, specific strategies employed by the purchasing function;

secondly, Purchasing's role in supporting the strategies of other functions;
thirdly, the strategic place of purchasing within the enterprise in supporting the strategies of the enterprise as a whole; and
fourthly, the utilisation of purchasing as a strategic function of the enterprise. While these four issues seem to be related, they are distinct areas in terms of their execution and impact on the purchasing function.

The broadening of the purchasing task means that the purchasing function has several vital responsibilities from a tactical viewpoint. Five responsibilities have been identified in this regard and these include:

firstly, purchasing is responsible to defend the industrial enterprise against inflation and should therefore question and investigate all price increases;
secondly, purchasing has a direct responsibility to maintain low capital investment in inventories. In this regard, purchasing management has the responsibility of acquiring specialised knowledge for the task of converting the liquid assets of the enterprise into assets which are less liquid and which carry higher risks;
thirdly, purchasing is a responsible factor in the quality assurance programme of the enterprise and therefore in the quality of the final product of the enterprise. Ensuring a quality assurance programme is important for several reasons. Quality affects cost and ultimately the return on investment. It also has marketing implications and affect other purchasing activities such as selecting suppliers, purchase prices and even quantities;
fourthly, purchasing has the responsibility to make optimal use of the financial resources of the enterprise. Materials purchased must not be seen in isolation but rather in relation to the function they are meant to fulfil. Materials are handled administratively, commercially, technically and physically and this is also associated with numerous costs. Consequently working capital may be unnecessarily tied up;
finally, purchasing shares the responsibility to innovate by making available new, alternative materials, manufacturing methods to the enterprise and suggest improvements in technology which enables enterprises to improve materials planning and supply systems.

It should not be overlooked that these tactical approaches may significantly improve productivity within purchasing and materials management. Therefore an integrated approach of materials management requires close co-operation between production planning, inventory control, quality inspection and purchasing. To achieve successful automation, system standardisation is a prerequisite. From a tactical viewpoint purchasing cannot be allowed to follow its own course. To ensure effective integration of the different materials-related areas, purchasing must also be placed in a materials management structure.

In general the scope of the purchasing function is far wider than the activities of the purchasing department. Gadde and Hakansson (1993:13) philosophically argue: "*purchasing comprises a company's behaviour in relation to its suppliers.*" In this regard they distinguish three tactical roles in purchasing potential to affect a enterprise's strategic competitive status. These include the rationalisation role, the development role and the structural role.

2.8.1 The rationalisation role

According to Gadde and Hakansson (1993) the first role referred to as the rationalisation role of purchasing comprises all the day to day activities performed to decrease costs successively. This may include improving or reducing the costs associated with various flows, or finding new solutions to technical or other problems. Three types of rationalisation activities are identified. **The first type** of rationalisation activity is related to discovering what needs to be purchased. This includes decision on whether to purchase or manufacture in house as well as the design of the products components which are to be purchased. In this regard Gadde and Hakansson (1993:8) suggest that one method which is often mentioned but seldom applied is known as value analysis which is an attempt to systematise a review of the value of various functions of a given product or solution, and to find alternative ways of satisfying the corresponding functions. **The second type** of rationalisation gains are related to finding new or different less costly suppliers, making it possible to keep prices down. This type of price chasing is still important although it may be

less dominant today than in the past. **The third type** of activity involves the rationalisation of flows. The flow of input materials and the flow of semi-finished and finished goods are the focus of this rationalisation goal. Capital efficiency measures and reduction of inventories are gradually becoming key areas of cost savings. This is clearly illustrated by Tersine (1994:xiii) who asserts: "*the efficiency and efficacy of the flow can substantially influence costs and revenue generation and thus hold serious implications for marketing, finance and production.*"

2.8.2 The developmental role

The second role presented by Gadde and Hakansson (1993) that has a major impact in purchasing potential to affect a enterprise's competitive advantage is the developmental role. For an industrial enterprise, suppliers are an important potential development resource. In many cases they are only used passively. The industrial enterprise waits for a supplier to develop new solutions and then decides whether or not to purchase them. Active role can turn the purchasing function into a major catalyst for taking better advantage of this resource. This is what Gadde and Hakansson (1993:8) refer to as the developmental role of purchasing.

There are numerous reasons for a purchasing enterprise to become involved in the development work of its suppliers, and also to interest the suppliers in becoming involved in the purchasing enterprise's development work. **The first advantage** is that better co-ordination is achieved in comparison with each one going forward along its own lines: the products developed are already familiar to the user. **The second advantage** is related to the increased developmental power that can be obtained from interaction of different resources. **A third advantage** is that time is saved - working in parallel instead of in series may lead to major time benefits in development work.

The need for collaboration in development and the consequent significance of the developmental role of purchasing has increased over time. Where purchasing enterprises find it difficult to develop and maintain its own knowledge of all these

special fields, in such cases it is natural for them to utilise the developmental resources of their suppliers. Another reason is the need to try to shorten lead times for design and development. This is considered one of the most important competitive factors in many industries today. To accomplish this, development work between customer and supplier must be better co-ordinated.

2.8.3 The structural role

Finally, the third role presented by Gadde and Hakansson (1993) that is considered to have an impact in purchasing potential is referred to as the structural role. The structural role of the purchasing function is defined as the way in which enterprises affect the structure of the supplier markets. An enterprise may choose to concentrate its purchases with one supplier. This strengthens the competitiveness of that supplier in relation to others. Alternatively, the enterprise may choose the strategy of dividing its purchases among suppliers in order to contribute to the maintenance of a number of alternative means of supply or alternatively the enterprise may want to have its main suppliers close at hand in order to have the prerequisites for co-operation and developmental potential. At times the enterprise may alternatively choose to use suppliers located at important centres of technology. This gives the enterprise a channel to the forefront of developments.

The conscious and unconscious actions of the purchasing management affect the structure of the purchasing market in terms of the long range numbers and locations of the alternative suppliers. For this reason, it is important for a company to analyse the long term consequences of its purchasing behaviour. It is equally important for a purchasing enterprise to successively identify other trends in structural development in relation to its main supplier markets. This makes it possible for the enterprise to orientate its own operations towards reinforcing the tendencies beneficial to it and counteracting undesirable ones.

According to Van Weele (1994:116) the movement into strategic management of purchased goods and services is not a simple task. It involves changing

philosophies throughout the enterprise around buying practices, acquiring new skills and creating cross functional participation and buying. It is important to create, and widely advertise, a change initiative that the entire enterprise can rally around. To achieve this, Van Weele (1994) contends that the enterprise must develop a well thought-out plan for change that includes the following key steps:

- understand what needs to change and how;
- move away from the transaction management practices and fully employ the more strategic practices such as calculating and measuring total cost;
- select the best value suppliers;
- redesigning the supply process and integrate key suppliers; and
- learn the most current leading edge philosophies and practices and how they are carried out in the work environment in other enterprises.

2.9 CONCLUSION

This conceptual chapter considered purchasing competencies, strategies and tactics. It details purchasing literature in order to provide a platform for the study. The literature survey clearly demonstrated that purchasing strategy and tactics are highly correlated with the performance of the enterprise. The lack of purchasing input during corporate strategy formulation reduces the opportunity for purchasing to make valuable contribution during strategic planning process. Effective corporate long range planning is an important element in an enterprise's efforts to grow and attain excellence. Purchasing and materials management function needs to be involved in strategy formulation and execution. The primary view of purchasing is that it interacts primarily with manufacturing and suppliers. However, strategic view of purchasing demands that it be linked to the market and the customer, thereby making the purchasing product a highly strategic variable. The next chapter examines the purchasing product as a strategic variable.

CHAPTER THREE

THE PRODUCT AS A STRATEGIC VARIABLE

3.1 INTRODUCTION

The previous chapter examined the challenges of strategic purchasing and clearly demonstrated that dramatically changing market and economic conditions require significant changes in the purchasing management function. Manufacturing enterprises continue to face an increasingly complex environment: raw material shortages, price volatility, new technologies, globalisation of business activities, currency shifts, supply and demand fluctuations and other such factors are combining to create a dynamic, challenging operating environment. As a result purchasing is becoming proactive and strategically important. Both buyers and sellers have strategies for dealing with one another. If well conceived and skilfully executed, purchasing strategy is highly critical to the success of any enterprise. Overall, an enterprise's growth and profitability will be affected greatly by its ability to secure supplies and to gain the benefits of new technologies from its sources of supply.

Purchasing strategies vary greatly from one purchasing situation to another because each product and situation are unique. Every strategy has to be tailored to the type of product being purchased, the stage of the purchasing cycle, the past purchasing history, the nature of the supply environment and the buying enterprise itself. The product that the manufacturing enterprise produces is the core of the enterprise and is therefore the pivot on which everything hinges. Invariably the major equipments, components, raw and processed materials, services, maintenance, repair and operating supplies which are crucial to the production process become strategic variables. Most enterprises spend more on purchased goods and services than any other input, giving the purchasing function the greatest potential leverage in altering the enterprise's competitive position. The sole intention of this chapter is to place in perspective the product as a strategic variable.

3.2 THE IMPORTANCE OF THE PRODUCT PURCHASED BY THE BUYING DEPARTMENT

Managing the cost of the product continues to be one of the primary focal point of an enterprise's goal-directed activity. Buyers are becoming aware of the importance of managing the cost of product. A number of requirements will impact on the ability of an enterprise to competitively succeed on a national and international basis. According to Monczka (1995:10) the most critical competitive capabilities include:

- low **product** prices as a result of being a low cost producer;
- highest perceived **product** quality;
- ability to bring new **products** from concept-to-customer in the shortest time in the industry;
- product** features that offer the highest performance; and
- product** support with the best customer services within short lead times.

In each of the above five cases, the **product** of the enterprise features prominently and the role of the purchasing department is explicit.

Furthermore, instead of manufacturing a component **product**, enterprises usually consider purchasing it. This is an important strategic change in large enterprises. Brandes and Lilliecreutz (1995:272) use the term outsourcing to describe the act of purchasing and present several alternatives to describe the concept outsourcing, namely, asset specificity and core competence or skills. One consideration for make or buy decision is who can make the **product** cost effectively. Bailey and Farmer (1990) describe the make or buy decision as a comparison between various kinds of calculable costs. According to Humbert and Passarelli (1997:289-294), three kinds of underlying reasons for decisions regarding buying rather than making, namely:

- cost efficiency reasons:** this is a compelling consideration for buying. An external source can supply a product more cheaply than an enterprise can manufacture it. This could shorten the time to market the product.
- need to focus on core competence:** this involves a strategic standpoint, which means that the enterprise's core competence ought

to be retained in-house, while "complementary resources" can be purchased from outside.

financial problems: if an enterprise has financial problems, it might need prune the enterprise and release its hold on certain resources in favour of external parties.

The abovementioned conclusively indicates that the **product** is a vitally strategic variable and an understanding of it is fundamental to the success of the purchasing department and the overall success of the enterprise.

3.3 CLASSIFICATION OF INDUSTRIAL PRODUCTS AND THE PURCHASING DEPARTMENT

During the past decade, globalisation, new technologies, shortened product life cycles and process technology advances have altered the ways in which enterprises compete. In view of the constantly changing customer demands and competitive offerings, the management of the cost of purchased goods and services continues to be one of the critical issues. An understanding of the nature of the "**buy**" on the part of the buyer is important. Is the purchase a repetitive buy? A one-time buy or a long term contract? Understanding the "**what**" the buyer is buying will specify the nature of the supplier-relationship that is desirable. This section presents two analyses of classification. The first one is a conceptual analysis and the second is a strategic one.

3.3.1 Classification of the purchasing product - a conceptual analysis

A literature survey suggests that it is difficult to classify industrial products categorically. There are almost bound to be marginal cases, so that mutually exclusive groupings are virtually impossible. One approach suggested by Webster (1991:4-16) would be to start at the fundamental point of basic raw materials and then to proceed through semi-processed products, components and eventually to completely finished equipment. Chisnall (1995:42) contends that this was the foundation of the classification adopted by the Industrial Marketing Research

Association based on analyses of the functions of marketing research in industrial markets. Three categories of products (and services) were noted:

- Capital goods** : sold as an inherent whole to further production, in machines, accessories or components;
- Primary products** : basic materials like steel, chemicals, or aluminium bars sold to manufacturers;
- Intermediate products** : such as tubes, castings or building materials which have to undergo some major change of form.

Other researchers have adopted various criteria for classifying purchasing products. Chisnall (1995:42), Hutt and Speh (1992:20), Van Weele (1994:15) and Webster (1991:4-9) refer to the product market (also called industrial market) as the market consisting of individuals and enterprises that purchase goods and services to be used in the production of further products and services for sale or rental to others. The abovementioned authors have identified three main methods of classifying purchasing goods:

Enter Goods - Goods entering the product completely, such as materials and parts.

Raw materials.

agricultural products (fruit and vegetables); and natural products (fish, crude petroleum, iron ore).

Manufactured materials and parts.

component materials (steel, cement, wire, textiles); component parts (small motors, tyres, castings).

Foundation Goods - Goods entering the product partly, such as capital items.

Installations

buildings and land rights (factories, offices) and fixed equipment (generators, computers, elevators).

Accessory equipment

portable or light factory equipment and tools (hand tools, lift trucks) and office equipment (typewriters, desks).

Facilitating Goods - Goods not entering the products, such as supplies and services.

Supplies

operating supplies (lubricants, typing paper) and maintenance and repair items (paint, nails, brooms).

Business services

maintenance and repair services (window cleaning, typewriter repairs);
and
business advisory services (legal, management consulting, advertising).

Stanton and Futrell (1987:196-198) state that industrial goods are differentiated from consumer goods because of their ultimate use. Industrial goods are those intended for use in making other products, or for rendering a service in the operation of a business or institutional enterprise. They classify purchasing products as follows: raw materials; fabricating materials and parts; installations; accessory equipment; and operating supplies. These five categories are based on the broad uses of products in contrast to the classification of consumer products on the basis of buying habits.

Raw materials: Purchasing goods which will become part of another physical product and which have received no processing at all, other than that necessary for economy or protection in physical handling', example, minerals, land; and wheat, cotton, tobacco, fruit and vegetables, livestock and animal products such as eggs and raw milk.

Fabricating materials and parts:

These products become actual parts of the finished product; already processed to some extent. Fabricating *materials*, example pig iron and textile yarn will undergo further processing. Fabricating parts will be assembled with no further

change in form eg spark plugs, fan belts, buttons.

Installations:

These are manufactured purchasing products - the long-lived expensive major equipment of an industrial user, example large generators, factory building and jet aeroplane for airlines. The differentiation characteristic of installations is that they set the scale of operation in a enterprise.

Accessory equipments:

Accessory equipments are used to aid production operations of an industrial user, but it does not have a significant influence on the scale of operations in a enterprise, and does not have become an actual part of the finished product. Its life is shorter than installations and longer than operating supplies. Examples are office equipment, small power tools and forklift trucks.

Operating supplies:

These are convenience goods of the industrial field; short-lived, low-priced items usually purchased with a minimum of effort. They help enterprise's operations but do not become part of finished product. Examples are lubricating oils, stationery and heating fuel.

The two purchasing product classifications have much in common, as can be noted from this brief review. However, purchasing products are viewed in different ways according to their function in diverse enterprises.

The use to which a product is put biases it towards a particular classification. Car accessories supplied as original equipment would attract a different classification from 'replacement' sales to fleet-owners or distributors. Market behaviour affecting the demand for purchasing products and services is, in general, very different from that experienced with consumer supplies.

There are basic differences which directly influence strategic and tactical operations.

These fundamental characteristics relate to factors such as demand, supply, pricing, quality, concentration ratios and special trading policies.

Compared with many consumer supplies, industrial supplies tend to be complex and sophisticated, example computer installations, power stations and automated processing plants. This particularly applies to capital equipment, which is also characterised as having relatively high durability. Such products tend to be bought fairly infrequently by any one enterprise.

Furthermore, capital goods are distinctly different from high-frequency purchases of consumer products such as food in that purchase can often be postponed for long periods of time. Admittedly, this may eventually lead to problems in industrial efficiency, but in that short term, at least, buyers of industrial equipment are able to exercise their prerogative as to *when* they buy specific equipment. Industrial markets are, therefore, subject to policy decisions on investment which may be affected by many factors, such as political events, outside the control of market suppliers.

However, the importance of the classification of goods to a buying enterprise lies in the ascribing of cost, namely, how does it enter the cost structure of the enterprise. Entering goods is completely an expense item and is assigned to the manufacturing process. Foundation goods are usually used up or worn out and therefore a portion of their original cost is assigned to the production process as a depreciation expense. Facilitating goods that support the operation of the enterprise are handled as expense items.

Within particular industrial markets, the complexity and cost of products vary considerably; some suppliers may be limited to relatively low-cost products like components, while others specialise in complete package deals, such as the design and building of a major institution like a hospital or airport. These are usually referred to as "turnkey" contracts.

Technological advances and the rate of innovation vary across industrial markets.

Lead time has been cut drastically and, in general, purchasing products are now sharing some of the dynamic character traditionally associated with consumer products. Chisnall (1995:285-286) points out that there is no enterprise so outstanding technically today that it can expect a long lead in a new discovery. Indeed the pace of change is enormous and this is particularly evident in the electronics field.

3.3.2 Classification of purchasing product - a strategic analysis

From a purchasing viewpoint, the discussion presented above, although useful, does not present a definite classification. Within this context it is not easy to find clear guidelines for setting up a purchasing strategy. Although the literature in this subject in the area of marketing is extensive, similar publications relating to purchasing are few. Nevertheless, an interesting approach is still the purchasing product portfolio technique, which has been presented by Kraljic (1983) and further expounded by Ellram (1995). Fundamental to Kraljic's approach is the idea that suppliers represent a different interest to the enterprise, and purchasing managers need to develop a differentiated purchasing strategy towards their supply markets. In this section the purchasing product portfolio is taken as the starting point for subsequent discussion.

In attempting to classify purchasing items, there are several questions that need to be asked about the nature of the buy and the relationship sought with the supplier: To what extent is the cost of the item/service important, perhaps due to high volume? To what extent does the supplier have a brand name/image that one can use to generate sales? To what extent is the technology used by the supplier critical to future products, line extensions or the next generations of products? To what extent is the item crucial to getting leverage with the supplier for other buys? To what extent is the purchase consistent with environmental/safety concerns? In a study reviewing these questions, Kraljic (1983) developed the purchasing product portfolio. The nature of the buy reflects the importance of the purchase to the enterprise, the profit impact of a given supply item and the impact on product

quality or business growth. The relationship sought with the supplier reflects short term and long term availability, number of suppliers, competitive demand and make or buy opportunities.

The **importance of purchasing** to an enterprise is measured by the impact of purchasing on the financial result. This can be reflected by the profit impact of a given supply item measured against criteria such as cost of materials, total cost, volume purchased, percentage of total purchase cost and impact on product quality. The **supply risk** is measured against criteria such as short-term and long-term availability, number of suppliers, competitive demand, make-or-buy opportunities, storage risks and substitution possibilities. The combination of these two variables yields the two dimensional matrix reflected in Table 3.1.

TABLE 3.1

KRALJIC'S PURCHASING PRODUCT PORTFOLIO

HIGH	Leverage products <i>(Competitive Bidding)</i>	Strategic Products <i>(Partnership)</i>	
PURCHASING'S IMPACT ON FINANCIAL RESULTS	Routine Products <i>(Systems contracting)</i>	Bottleneck Products <i>(Secure continuity of supply)</i>	
LOW	LOW	SUPPLY RISK	HIGH

SOURCE: Van Weele A J (1994), *Purchasing Management, Analysis, Planning and Practice*, London: Chapman and Hall. p 120.

According to Van Weele (1994:120), "*Strategic products are generally obtained from one supplier, and/or they concern products of which the short- and long-term supply is not guaranteed. Furthermore, they represent a considerable value in the cost price of the end product.*" In the case of the motor industry, engines and gearboxes will be considered strategic products. Van Weele (1994:121) further points out that enterprises will strive for a partnership style of relationship with suppliers of **strategic products**. Close and lasting co-operation with suppliers must be achieved in order to obtain significant improvements in the areas of product quality, delivery reliability, product development and design.

Bottleneck products represents a very limited value but they are vulnerable with regard to their supply. In the case of the food industry, natural flavourings and vitamins will be considered bottleneck products. The purchasing policy for these products should focus primarily on securing continuity of supply.

Leverage products, in general, can be obtained from various suppliers and represent a relatively large share of the cost price of the end product. As the case with the strategic product, a small change in price can have a relatively strong impact on the price of the end product. Raw materials such as steel and aluminium will be classified as leverage products.

Finally, **routine or normal products** usually have a small value per unit and there are many alternative suppliers. Cleaning materials, office and maintenance supplies will fall into this classification. Table 3.2 depicts an operational and tactical approach to Kraljic's Product Portfolio.

From Table 3.2 it can be seen that, amongst other things, the nature of the product impacts profoundly on the formulation of a purchasing strategy. The key performance areas range from functional efficiency in the case of routine products to long term availability in the case of strategic products. The focus commences with purchasing management in the case of routine products and progresses towards supply management in the case of strategic products.

TABLE 3.2
AN OPERATIONAL LOOK AT KRALJIC'S PRODUCT PORTFOLIO

	ROUTINE PRODUCTS	BOTTLE-NECK PRODUCTS	LEVERAGE PRODUCTS	STRATEGIC PRODUCTS
TIME HORIZON	< 12 Mths	Variable	12-24 mths	Up to 10 yrs
SUPPLY	Abundant	Production base scarcity	Abundant	Scarce or high value
KEY PERFORMANCE CRITERIA	Functional efficiency	Cost management and reliable short term sourcing	Cost/price and materials flow	Long term availability
SOURCES OF SUPPLY	Established local	Global, mostly new with new technology	Multiple suppliers, chiefly local	Established Global
DECISION AUTHORITY	Decentralised	Decentralised but centrally co-ordinated	Mainly decentralised	Centralised
FOCUS	Purchasing Management	Sourcing Management	Materials Management	Supply Management
IMPORTANCE OF PURCHASING	Low	Low	High	High
COMPLEXITY OF SUPPLY MARKET	Low	High	Low	High

SOURCE: Adapted from Cammish R and Keough M (1991), A strategic role for purchasing, *The McKinsey Quarterly*, vol. 3, p 13.

Consistent with Kraljic's approach, Ellram (1995b:442) identifies three categories of industrial products. These are **low impact**, **leverage** and **strategic products**.

Ellram's (1995b) classification is based upon the importance of the purchase in terms of its cost impact and the nature of the purchase and the type of supplier relationship. This is reflected in Table 3.3:

Leverage products are items purchased in large quantity that are made to stock with many available sources. Items are available on commodity exchanges.

Strategic products are items important to distinct competency and are important to the future success of organisation.

Finally, **low impact products** refer to mostly specialised services of low investment and are often repetitive buys.

TABLE 3.3

A STRATEGIC VIEWPOINT OF PRODUCT CLASSIFICATION ACCORDING TO ELLRAM

ON GOING MAJOR IMPACT	LEVERAGE PRODUCTS Items purchased in large quantity that are made to stock with many available sources. Items are available on commodity exchanges	STRATEGIC PRODUCT Items important to distinct competency Items important to the future success of organisation
NATURE OF BUY		
ONE TIME LIMITED IMPACT	LOW IMPACT Most specialised services Low investment Repetitive buys	
	ARMS LENGTH	STRATEGIC ALLIANCE
	TYPES OF RELATIONSHIP SOUGHT WITH SUPPLIER	

SOURCE: Ellram L (1995), *An approach to applying purchasing cost management tools, First Worldwide research symposium on purchasing on purchasing and supply chain management*, vol. 1, p 453.

The research work by Lehmann and O'Shaughnessy (1982:9-14) and Evans (1982:23-28) also identifies four product categories for industrial purchases. **Routine order products** are those having no problems associated with learning to use the product and no questions regarding the functional capability of the product. **Procedural problem products** are those for which there is no question about the capability of the product, but there may be problems in learning to use it. In the case **performance problem products**, there may be some doubt as to whether the product will perform satisfactorily in the application for which it is being considered. In particular there may be a problem concerning the technical outcome of the product's use. Finally, **political problem products** are those that require large capital outlays and the buying decision will likely involve people from several different areas within the enterprise.

The above discussion clearly demonstrates that there is substantial variation in purchasing approach, arising from differences from what is being purchased. The differences are attributed to technical reasons, administrative reasons and supplier market-related reasons. Based upon this the buying decision process will be more or less complex, according to the importance and scope of the purchase being considered. As the complexity increases, the amount of time required for the purchase decision and the number of persons involved tend to increase, as do the buying criteria of the purchasing enterprise and the amount of information required by the decision makers.

Managing the cost of purchased goods and services seems to be one of the primary focal points of in purchasing. Purchasing controls a very high proportion of costs in most enterprises. While buyers ought to know that effectively managing the costs of purchases is a fundamental duty, there are many approaches to cost management. This section explored the idea that a simple approach initially will entail developing a framework for classifying purchases, so that standard procedures can be developed for analysis of items that fit into certain classifications.

The classification of industrial products by Lehmann and O'Shaughnessy (1982),

Evans (1982), Kraljic (1983) and Ellram (1995) is most relevant to the present study because they specifically examine the relative importance of the various decision criteria used in formulating a competitive strategy. This would be further explored in Chapter Five which considers purchasing for profitability.

3.4 THE PRODUCT AND BUYING SITUATIONS ANALYSED

Webster has been a frequent contributor to industrial marketing research. One of his prime developments was a conceptual framework for analysing the industrial buying process. Webster (1991:29) using the pathbreaking study of Robinson, Faris and Wind (1967) identifies the eight phases in the purchasing decision process. The value of this particular description of industrial purchase decision process is that the same purchasing product may elicit markedly different purchasing patterns in different enterprises with various levels of experience and information. Therefore Hutt and Speh (1992:71) contend that "*attention must be concentrated on buying situations rather than on products.*" Consistent with the findings of Robinson, Faris and Wind (1967:13-18), Webster (1991:30) suggests three types of buying situations, namely, the straight rebuy, the modified rebuy and new task situations.

The straight rebuy is the purchase of an industrial product purchased before, from the same supplier as before although the purchase terms may vary slightly. Usually the buying department has substantial experience in dealing with the need and it requires little or no new information. Evaluation of new alternative solutions is considered unnecessary and are unlikely to produce appreciable improvements. Such purchases can be electronically organised and can be handled in a completely routine fashion with the triggering mechanism set at a specific inventory level, or a certain day of the month or by the needs of the user department.

The modified rebuy is the purchase of an industrial product procured before but includes the search for information about alternative sources of supply and terms. Purchasers feel that significant benefits may be derived from a re-evaluation of alternatives. The buying department has experience in satisfying the continuing or

recurring requirement but the buying department believes it worthwhile to seek additional information and to consider alternative solutions. Several factors such as cost reductions, quality and delivery improvements may trigger such a re-assessment. Hutt and Speh (1992:73) suggest that "*limited problem solving best describes the decision-making process for the modified re-buy.*"

Webster (1991:30) indicates that **the new task situation** involves the purchase of something not purchased before, with all stages of buying decision process involved. In the new task buying situation, the problem or need is perceived by the buyers as totally different from previous experiences. Therefore a significant amount of information is required for decision makers to explore alternative ways of solving the problem and to search for alternative suppliers. Howard and Sheth (1969) suggest that extensive problem solving best describes this decision making process.

The models presented in this section are not intended to be prescriptive, but they do provide a framework from which to approach the process of procuring the purchasing product. Earlier models implied that the buyer was a passive recipient of advertising and sales message but the models just described suggest that buyers are discriminating in their search for and use of information. There are classes of buying decisions which can be defined by positions on a continuum from simple and routine decisions (habitual behaviour and automatic reordering) to complex decision making characterised by large amounts of money and significant change from previous practices.

3.5 COMPETITIVE CAPABILITY, PERFORMANCE IMPROVEMENT REQUIREMENT AND THE PRODUCT

A number of competitive capability requirements will impact on an enterprise's success. Monckza (1995:10) presents the **purchased product** as a critical element in the formulation and implementation of a competitive strategy. Within this context the role of purchasing is explicit. The task of a competitive strategy is to move an enterprise from its present position to a stronger competitive one. This must be done

by adapting and responding to external trends and forces such as competition, market changes and technology and developing and matching the resources and capabilities of the enterprise with the opportunities. Van Weele (1994:109) asserts that over the past ten years the competitive situation of West European enterprise has changed dramatically. The reasons outlined for this situation are:

firstly, European manufacturers experience far more competition from countries that were not appointed as major producers until recently. These include Korea, Hong Kong, Singapore, Thailand and Taiwan; and
secondly, enterprise in Western Europe seems to be under represented in the areas of new technologies and emerging new industries.

Management increasingly expects purchasing, working with suppliers, to achieve continuous price/cost reductions. However, expecting reductions to occur is different from actually realizing the intended improvement. Given purchasing's historical preoccupation with competitive bidding and price, buyers often find themselves ill-prepared to pursue price/cost reduction initiatives with suppliers. This section suggests that purchasing should posture itself towards **competitive capability, performance improvement requirement** within the context of the discussion in the previous section. A strategic definition of an industrial product permits purchasing to become involved in the creation of creating value (price productivity and improvement) by reducing, and eliminating where possible, the cost drivers that influence purchase price.

Intense worldwide competition and the increasing sophistication of customers is creating relentless pressure on firms to reduce costs continuously. It is not unexpected that management looks to purchasing to make a major contribution toward realising corporate profitability targets. Russil (1997:9) reveals that, on average, firms must attain continuous cost, quality, time, and delivery improvements from suppliers and themselves to remain competitive. Furthermore he contends that in the late 1980s that most firms had to achieve real year-to-year cost reductions of at least 5 percent throughout the 1990s or risk losing market share to more efficient and effective producers. These cost reduction pressures should increase. One reason for

this is the suggestion by Van Weele (1994:109) "*that many industries seem to be at the stage of saturation or decline.*" Figure 3.1 shows the various stages that describes the cycle in the sales history of a product.

FIGURE 3.1

INDUSTRY LIFE CYCLE AND THE PURCHASING PRODUCT

INTRODUCTION	GROWTH	SATURATION	DECLINE
Optical Industry Biochemistry	Telecommunications Pharmaceuticals Medical Equipment	Chemicals Food Products Rubber, Plastics Car industry	Textiles Clothing Leatherware Shoes Steel Shipbuilding

SOURCE: Van Weele A J (1994), *Purchasing Management, Analysis, Planning and Practice*, London: Chapman and Hall, p 110.

An analysis of Figure 3.1 suggests that enterprises in the saturation and decline stages, can only maintain and expand their market position if they are in a position to market products at a quality level comparable to that of the competition in the Far

East. Furthermore, and equally important, they need to provide a comparable service at competitive prices. Van Weele (1994:110) claims that "*as a result of this situation, the long term strategy of many companies nowadays focuses on selective growth.*" One consequence of this strategy is that enterprises dispose or sell off those activities that are not considered to belong to their core business. A widely advertised example (also cited by Van Weele 1994:110) is that of an Anglo-Dutch holding company, Unilever which sold out almost fifty operating companies and at the same time acquired another fifty. One major takeover was Cheeseborough Ponds. This acquisition considerably enhanced Unilever's competitive market position in food, detergents and toiletries. As a result of this type of re-orientation, purchasing's share in the cost price of the finished product becomes significant.

It is clear that the increasing emphasis on competitive analysis is a trend involving the purchasing function. The drives for cost reduction and quality improvement are leading to much more complete and precise analysis of competing alternatives and the cost/quality data associated with them. Make - buy analysis is assuming a significant role in sourcing investigations. Similarly, analysis involving end product, part purchases and components from given suppliers is also becoming a routine part of the purchasing function. In addition functional value analysis is receiving increasing attention in a growing number of enterprise trying to gain a competitive advantage.

3.6 VALUE BASED PURCHASING AND COMPETITIVE ADVANTAGE

Heinritz et.al. (1991:32) assert that if enterprises are to compete with foreign competitors then the enterprise must offer more perceived value. As the marketplace becomes more competitive, enterprises are attempting to increase the value of their products and services and reduce the non-value added activities both in terms of numbers and cost. Consequently, the concept of value is receiving increased attention. Schonberger (1990:1-8) contends that the value chain concept is an approach used to focus on increasing the value of their products and services and reduce the non-value added activities, both in terms of number and cost. The value chain presents the enterprise, and the entire economy, as a series of links in a chain.

According to Dummond (1994:4), "*the chain consists of three primary links: upstream - with the enterprise's suppliers, internal - among the enterprise's functions and downstream - with the firm's customers.*"

Value-based purchasing focuses the decisions of purchasing personnel on the creation of value rather than on the traditional objectives of cost savings and efficiency. A enterprise can no longer afford to perform activities or incur cost that do not increase the value of the product or service that is being produced. Each individual and function plays a role in increasing the value of the enterprise's products and services. Value chain management pursues the viewpoint that the purchasing function, interacting with the internal and external environment of the enterprise, has tremendous potential to increase value.

Value chain management recognises that a value chain exists such that the output from a particular function or individual becomes the input for another function or individual. Each function within the enterprise can use the concept of value chain to identify its role in improving the value of the enterprise's output. The purchasing function utilises various inputs to perform value added processes. If performed effectively, the output of the enterprise will certainly provide the enterprise with a competitive advantage.

An analysis of the literature dealing with value-based purchasing indicates that there are three groups of organisational variables that have the most effect on a enterprise's ability to perform value-based purchasing, namely, the performance measurement system; functional interaction and access to external information. **Performance measurement systems**, consisting of goals and objectives, performance measures and feedback have been shown to affect an individual's decision and perceptions. According to Locke and Latham (1990:474-483) goals and objectives, especially specific and challenging ones, are thought to enhance performance by increasing the individual's effort and persistence by focusing attention and by improving overall strategy formulation. Performance measures provide guidelines in decision making, while feedback, whether outcome oriented or of a behavioural process nature can

interact with outcome performance measures to enhance performance.

Communication processes provide information to all parts of the enterprise, facilitating decision making and the accomplishment of tasks. **Functional interaction**, not only improves individual performance but it allows individual buyers to contribute to an enterprise's value by focusing on internal users that need to be linked to the external environment. The information flow is a manifestation of the purchasing's reporting level, the organisation of the purchasing function and the extent and type of internal communication that is received by the function. Like functional interaction, **access to external information** allows purchasing to link the internal user to the external environment. Functional interaction allows the information to be transmitted, while access to external information allows for the acquisition of the necessary information. The exchange of information enhances purchasing's awareness of new techniques and concepts, such as electronic data exchange, just-in-time systems and supplier partnership programmes.

3.7 THE PRODUCT AND INNOVATION - STRATEGIC CONTRIBUTION TO COMPETITIVE ADVANTAGE

It is widely reported in the media that the Siemens Group has stated that by the year 2000, fifty percent of its sales will come from products that have yet to be introduced. Generating a steady stream of new products of superior quality at competitive prices is vital to the survival and growth of most enterprises. Competitive advantage results from the ability to reduce time to market and respond quickly to changing customer demands. The success of this depends on the ability of the enterprise to skilfully gather resources and combine inputs from many sources in a synergistic fashion. Two important resources for new product development efforts are purchasers and suppliers. Through early involvement, they can proactively participate in new product development.

Historically, products were generated from the ingenuity of research and development. Considerations of marketability and producibility were secondary to

the inspiration of engineering. When it became evident that enterprises could no longer sell everything they produced, the marketing function entered the picture as a moderating or initiating force. The production and purchasing functions were not involved in the decision making processes and were in fact, only informed after commitments were made and schedules set. Unrealistic launch deadlines often could not be met due to supplier capacity constraints and lead time requirements. More important, cost parameters set in the process were difficult to meet. In marked contrast to such traditional practices which are characterised by strict separation of functions, modern enterprise utilise the unique talents of their own employees and their suppliers by involving them in co-operative efforts from the outset. Cross-functional new product teams capitalise on and combine the expertise and creativity of representatives from many functional disciplines as well as external partners. Purchasing's role in this vital context can and should be substantial. Purchasers can avoid unnecessary cost and cut cycle time significantly due to their familiarity with technology, cost, lead times and sources. Clearly, purchasing's point of greatest leverage is at the beginning of the innovative process. If it is to make a strategic contribution to an enterprise's competitive advantage, it must participate in the new product development from the outset. Sustaining and advancing an enterprise's competitiveness through improved product development that draws on a variety of external and internal resources is crucial to its survival and growth. Purchasing plays a key role in this process by both contributing to its own expertise and creativity and facilitating contributions from suppliers whose talents also serve as vital external resources.

Walshe, Ray and Bruce (1988:201-206) suggest that the integration of design with purchasing, marketing and manufacturing at an early stage will save time and avoid later costly modifications. An integrated approach configures products closer to customer needs and enables them to be procured and produced more economically. Carter and Baker (1992:13-23) advocate a similar total product development approach that uses an integrated process involving all disciplines. This focus on the purchasing product and process is the thinking behind concurrent engineering. Active participation of strategic purchasing in product development activities can result in

various benefits to the enterprise. These include products meeting customer requirements; superior product design; improved product quality; competitive cost; leading-edge technology and compressed time to market. With early supplier product design involvement, key suppliers participate during the product development process or earlier design phases but before completion of product specifications.

3.8 THE PRODUCT AND LEAN PRODUCTION

Womack, Jones and Roos (1990:99) use the term **lean** to express a system that uses less of all inputs to create outputs similar to the traditional mass production system but offering an increased choice for the end consumer. Hines (1996:4) categorically points out that: "*... detailed measurements of the best Japanese manufacturers particularly in the automotive industry have shown that they typically use half the time and effort to manufacture the product with half the defects and considerably less than half the inventories.*" The logic behind lean production is that the enterprise jointly identifies the value stream for each product from concept to consumption. Lamming (1995:123) argues that: "*...lean production requires the elimination of duplication of effort and capability in the supply chain, combined with a philosophy of continuously increasing the expectations on performance and self imposed pressure to excel. This is achieved by recognition of mutual dependence and common interest between customer and supplier - beyond the principle of operational collaboration (as characterised by supply partnerships): such strategies require reconception of the business unit.*" The traditional process of purchasing is built upon duplication of effort and capability. Buyers and suppliers typically run a multitude of systems designed to check up on one another and to make allowances for inadequacies. The concept of progress chasing or expediting is a typical example and adds nothing by way of value and thus represents total waste. In this regard Hines (1995:300) argues that "*... purchasing is now becoming the architect of value stream excellence.*"

A detailed study of the writings of Womack, Jones and Roos (1990), Lamming (1995) and Hines (1995) suggests that an enterprise that embodies a lean purchasing policy

should at least have the following characteristics:

an explicit, strategic approach to the development of the supply base, following a policy of integration through co-operation and describing it in structured terms as an extension of the purchasing enterprises own operation;
an extensive outsourcing of responsibility for design and re-design of products, services and systems with value being added at each stage of the process by the most appropriate unit, at the lowest cost in terms of operational activity;

sourcing policies which favours continuity of supply from existing sources whilst allowing opportunities for new suppliers to win business on the basis of integration into the supply base, culturally, commercially and technologically;

a philosophy of continuous improvement based upon learning, including the recognition that the supplier might be able to teach the enterprise;

a readiness to develop concepts originated by the supplier and thus a recognition of the need to share information traditionally viewed as a secret;

direction of people within the purchasing along conceptual lines, rather than basic commercial drivers of price reduction and supply continuity. (In this regard appraisal methods and performance schemes in lean purchasing system would be based upon factors such as how well purchasing staff contribute to new projects, or the extent to which suppliers develop skills as a result of buyer's guidance and co-operation with them;

a dismantling of blame cultures in which the easy route of blaming the supplier for failures; and finally

genuine influence of senior purchasing managers in the pursuit of value adding.

It can be observed that the lean purchasing system leads to continuous cost reduction through better utilisation of all resources and at the same time minimising wasteful practices.

3.9 THE PRODUCT UNDER CHANGING PRODUCT AND MARKET CONDITIONS

As a result of assuming new responsibilities, the need will arise among buyers for strategic models to effectively manage a dynamic environment where variables such as technology, customer preferences, materials availability and quality, government regulations and competitors' strategies are constantly changing. The conceptual models that are available include the product portfolio model, market attractiveness-business position matrix and profit impact of marketing strategy. The product life cycle advocated by Rink (1995:315) suggests that the nature of purchasing strategies should be formulated and implemented by stages in a manufactured product's sales cycle. The product life cycle is a generalised model representing sales trend of a product from the time it is first placed on the market until it is later removed by the enterprise. Schematically, the product life cycle can be approximated by a bell-shaped curve, which is divided into sometimes five phases, pre-commercialisation, introduction, growth, maturity and decline phases.

By determining in which phase of the product life cycle the product is in, the purchasing department can ascertain a set of purchasing strategies that they should consider implementing in respect of the purchasing product. The basic criterion for strategy formulation is the purchasing department's contribution to profitability or return on its investment. Rink (1995:315-324) discusses extensively the role of the product life cycle theory in the formulation of an industrial product strategy. The gist of his findings are presented in the next subsection.

In the **pre-commercialisation phase**, the policy of the purchasing department may be prompt service from suppliers on trial orders for a variety of items. During **introduction phase**, the purchasing department may favour sub-contracting and during the **growth phase** the purchasing department may opt for materials to be processed in the enterprise's own facilities. During the **maturity phase**, the purchasing department may investigate the feasibility of long term contracts with fewer suppliers and finally during the **decline phase** purchasing may consider

subcontracting to accommodate new products. The general idea that this model suggests is that the purchasing department in procuring should opt for variable costs when sales are low and to shift to fixed costs when sales are growing. The former reduces losses and risks whilst the latter enhances profitability.

3.10 THE PRODUCT AND THE BUYING DEPARTMENT: A HISTORICAL SURVEY

The earlier sections of this study alluded to the industrial product as a highly strategic variable. It would be grossly unfair to believe that only modern authors have considered the product to be a strategic variable. There has been some classical studies that have focused on the buying department. This section presents an historical overview.

Erickson (1979) cites a notable study of the various influences on purchasing decisions over 11 major industries including the chemicals industry conducted by the *Journal Scientific American* in 1950. The study centred on the journal's readership, which was largely made up of scientific and technical staff, many of them employed in large enterprises. This research was updated in 1970 and expanded by Erickson in 1978 when, however, the study was restricted to the chemical industry. There was generally a very good agreement between survey findings of 1950, 1970 and 1978, which indicates the influence of various departments in buying decisions. The purchasing department continued to play a key role in buying materials, components and equipment, especially when it came to taking advantage of new price differentials, finding new sources of supply and choosing suppliers.

An extensive multinational research study focusing on the buying process was conducted by Banting et.al. (1985). The findings of study were based on a sample of 1 632 respondents spread over Australia, Canada, the United Kingdom and the United States. The study confirmed that managers do differentiate between various stages of the buying process, and responsibilities for these are assigned to different functional areas or departments within the company. Another important finding was

that the industrial buying process is more concerned with *what* is purchased than with any rational characteristics. The buyer-seller relationship is of paramount importance, and the various roles in buying appear to be much the same wherever business is being transacted.

Buckner (1967) who was sponsored jointly by the Institute of Marketing and Industrial Market Research Limited, gave a wealth of data about the buying procedures of over 900 enterprises. An important finding of this study conducted by Buckner (1967), revealed that communication between the buying enterprise and the supplier was not being made with the people in the buying enterprise who really made the decisions to buy specific types of product or service. This important British research indicated that industrial purchasing was essentially a team effort involving groups of specialists each with a definite delegated task. Actual routines varied according to the types of product and the nature of the enterprises.

Brand (1972) showed how decision-making units reached their purchasing decisions. A further step forward was taken in 1974 with the publication of **How British Industry Buys**, which was sponsored by the Financial Times and based on research undertaken by Industrial Market Research Limited. This updates the earlier research and also extended it into two new areas - industrial buying of private cars and commercial vehicles. Also covered were plant and equipment, materials and component parts; there was, in addition, a special study of the British construction industry's purchasing routines. The findings of this survey confirmed that industrial purchasing is a complex operation, with the nature of products and the amount of expenditure largely controlling the levels of management involved.

These historical research findings indicate the importance of understanding the complex nature of enterprises, buying departments and their products. In the case of plant and equipment, **How British Industry Buys**, showed that the production manager played a vital role in initiating the decision to expand existing capacity. This was particularly evident in larger enterprises. In smaller enterprises the managing director was significantly involved at this buying stage, and in enterprises with

between 100 and 499 employees other directors were active.

Webster (1972) identified the five roles in the buying process. These are: **gatekeeper; user; influencer; buyer and decider**. These were the functions of the buying department. At times, these roles may be undertaken by the same person; often, however, different people are active in the various roles in specific buying situations. The influence of individual members of the buying team will also be likely to change according to the nature of the purchase under consideration, as the surveys into British industry revealed.

The **gatekeeper** in the buying team deserves special consideration by suppliers. Their identities may also not be easily discovered. In some cases, they may be junior executives who collect data sheets on equipment and send out routine enquiries for standard supplies. With more expensive and frequently purchased items, the gatekeeper's role may be filled by a senior technical expert. It is of tactical importance to know *who* the specific gatekeeper is and the degree of influence exercised over the purchase of particular types of goods. In the purchase of a computer system, Pettigrew (1975) noted that internal politics were important influences; in particular he observed how the gatekeeper can structure the outcome of buying processes by filtering and amending the flow of information to suit his or her own objectives.

Users in some organisations may have particular influence on the type of product and the origin of supply, especially with some technical supplies. Their recommendations may be considered as vital inputs in the buying process. Users of products may be groups of individuals, perhaps laboratory research teams whose expert knowledge and practical skill will be likely to weigh more heavily than considerations relating to price, discount terms and payment. Fletcher (1978) found that the engineer may want a to product to have long life; the safety officer, on the other hand, may want one that carries no risk; while the buyer may be looking for the cheapest product. In such cases there is resultant clash of objectives. In this regard a shrewd marketer will segment a promotional campaign so that different appeals are made to the various

specialists taking part in the purchase of his or her products.

Chisnall (1995:81) basing his findings on a sociological research conducted by Katz and Lazarsfeld argues that "*...influencers may not be readily identified. Communication within organisations is likely to be informal as well as formal; informal and personal influence may be significant in suppliers.*" Personal influence in consumer buying behaviour has been researched at some length, In industrial markets, a survey of 58 purchasing agents and other executives involved in buying was undertaken Webster (1970). His findings supported beliefs which were already widely held about industrial buying behaviour.

Webster (1970) found that informal communication in industrial markets may be much less frequent than in consumer markets. Buyers occasionally may telephone their counterparts in other enterprises to check urgently *where* to buy certain supplies, but seldom *what* to buy. The general reaction was to avoid providing information about newly purchased products which gave particular companies some competitive advantage. The well-known tendency of consumers to reduce post-purchase anxiety by discussing their purchases with other users appeared to be absent from industrial buyers.

Another important finding related to the role of the manufacturer's salesman who was regarded as a source of highly useful and reliable information. His influence was felt throughout the various stages of purchasing. His 'flexibility' as a communicator was regarded as particularly important; the right kind and amount of information could be provided by an experienced technical representative who was highly trusted by purchasing agents.

The vital role played by industrial sales forces is also confirmed by Webster (1991:285- 301) in a later research, which stresses that personal contacts are at the heart of the interaction between enterprises and, in industrial markets in particular, serve as the medium through which communications in buying and selling take place. Multiple tasks are performed during the interactions between the negotiating parties:

information exchange, assessment, negotiations, crisis insurance, and social and ego enhancement.

Opinion leadership - another marked factor affecting consumer buying seemed to be largely ineffective with organisational supplies. Webster (1970) found that in general companies felt the specific nature of their problems precluded the probability of other manufactures having exactly the same experience: these would therefore be unlikely to be useful guides. The two respondent companies which acknowledged the value of opinion leadership shared similar views: that companies which were looked upon as opinion leaders were of large size, were committed to planned programmes of new product development, were financially successful and were characterised as 'growth companies.

Webster (1970) concluded that word-of-mouth communication from *external* sources did not appear to be significant in the industries he researched, the key figure was the suppliers' salesman. It should be noted that Webster focused on *inter-firm* dimensions of internal communications; he did not study relationships. This aspect was researched by Martilla (1971), whose studies in three industrial markets showed that 'word-of-mouth communication is an important influence in the later stages of the adoption process. Opinion leaders were found to be more heavily exposed to impersonal sources of information than other buying influences in the enterprise.

Contrary to Webster's general findings, Martilla (1971) observed that influencers in the paper-converting markets also reported that they sought information and opinions about paper from persons in competing enterprises, in much the same way as within the enterprise. He further added that generalisations about buying behaviour - industrial or consumer - appear to be unwise; the nature of co-operation which exists even among competitors varies from enterprise to enterprise and some industries are characterised by their attitude of friendly collaboration with competitors at trade federation level and through personal contacts at senior level.

Martilla (1971) agrees with Webster (1970) in that industrial 'opinion leaders' were

difficult to identify, but in paper-converting enterprises they appeared to have more exposure to publicity material and sample books than the other executives who took part in the buying team. He suggested that, if this pattern of impersonal communication applied to other industrial supplies, substantial advertising campaigns might be advisable to bring new ranges of products and services to the attention of buying influential's, who had no direct contact with suppliers' sales staff.

Chisnall (1995:83) notes that the functions of **buyer** and **decider** in some cases are undertaken by the same person. The specifier or decider may be discovered only after considerable research. An enterprise supplying components for air filtration equipment found that the vital link in the buying chain was, in certain cases, the section leader of the team of design draughtsmen who actually nominated the suppliers of specific components. Enterprises generally prefer to draw their suppliers from enterprises which have established a reputation for quality and reliability. Professional judgement of the suitability of some prospective suppliers may well hinge on the estimation of, for example, the production engineer. The power of the buyer is therefore subject to considerable constraints in selecting some suppliers.

This insight into factors which affect purchasing decisions should be comprehensive. Apart from technical and economic factors which, of course, are important, non-economic inputs are also significant. These latter factors are based on some of the concepts of sociology and psychology. Their influence is often subtle and not easily identified. This does not mean that they should be ignored or left largely to trial-and-error learning, with all its associated shortcomings.

In business negotiations, the interaction between buying and selling enterprises is at both corporate and individual levels. At the former level, contractual obligations are arranged, while at the latter, personal contacts are made and individual relationships established. This interaction continues if both buyer and seller consider that they benefit from it; the relationship is essentially mutual and dynamic. Conflict may arise from time to time, but most industrial markets tend to have stable and long-established relationships.

3.11 THE PRODUCT AND QUALITY

When one uses the expression "quality" one usually thinks in terms of an excellent product or service that fulfils or exceeds one's expectations. These expectations are based on the intended use and the cost. Besterfield (1994:1) cites the American National Standards Institute definition of quality as: *"the totality of features and characteristics of a product or service that bear on its ability to satisfy implied or stated needs. Stated needs are determined by the contract, whereas implied needs are a function of the market and must be identified and defined. These needs involve safety, availability, maintainability, reliability, usability, economics and environment."*

The price of a purchase product is easily defined by the monetary unit the other needs are defined by translating the features and characteristics for the manufacture of the product into specifications. Besterfield (1994:2) further points out that conformance of the purchase product to the specifications is measurable and provides a quantifiable and operational definition of quality. Quality is not the responsibility of any one person or functional area. The responsibility for quality begins when marketing determines the customer's quality requirements and continues until the product is received by a satisfied customer.

Magad and Amos (1995:240-) contend that purchasing professionals regard product quality as the number one consideration in any purchasing decision. This does not mean that purchasing should always obtain the best possible quality as this may be detrimental to the profit of the enterprise. The role of purchasing is to obtain the best quality product, considering the function that must be performed at the lowest possible total cost. Description and specification of product quality are not the responsibility of purchasing alone, but are the responsibility of various groups. The purchasing department is responsible for checking the completeness of the product description and follow-up between supplier and the user department. Product quality is indeed a manifestation of the relationship between the buyer and the supplier.

In this regard Stuart and Mueller (1994:14) argue that "*total quality management is a philosophy and a quality process designed to prepare a manufacturer for world class competitiveness.*" Commenting on supplier certification in respect of quality, Inman and Hubler (1995:11) suggest that the entire process should be certified not just the product.

There has been a major emphasis by the purchasing department in developing quality assurance programmes. These programmes are closely related to the increase in competition and the widespread introduction of the Just-in-time philosophy of manufacture. Supplier quality improvement programmes can have a significant effect on the prices paid for purchased materials. In this regard Carter and Narasimhan (1995:15) argue that: "*the idea that a firm should necessarily pay a premium price for high quality is untenable. The highest quality supplier should have a very low-cost structure and support competitively low prices.*"

For years purchasing has been involved in working with suppliers to improve the quality of incoming materials. Purchasing can also maximise a finished product's perceived quality and customer service. An improvement in the quality of purchased materials can have a major effect on the internal operations of the firm. As the quality of incoming materials increases, the cost of expediting, production control, inspection, material handling and indirect labour will decrease substantially. In view of purchasing department's unique role in integrating supplier's operations into manufacturing operations of the enterprise, the function can play a major role in promoting total quality management and assuring customer satisfaction.

3.12 THE PURCHASING PRODUCT, CONCURRENT ENGINEERING AND VALUE ANALYSIS

Concurrent engineering has been defined in various ways. Dowlatshahi (1992:21), viewing concurrent engineering as a manufacturing strategy capable of providing the American manufacturing system with a competitive advantage in the world marketplace, calls "*... for the consideration and inclusion of product design*

attributes such as manufacturability, procurability, reliability, maintainability, schedulability, marketability and the like in the early stages of product design."

The effect of purchasing in overall product design, in terms of cost, quality and availability of raw materials cannot be over emphasized.

Purchasing can help in designing out non-essential features and is in a position to provide materials and capable suppliers to meet the functional capability of the product at the lowest practical cost. In this regard Dobler and Burt (1996:144-156) argue that purchasing can frequently provide designers with parts and components that have common and commercially available specifications that can be used interchangeably to produce the same product without impairing the product utility or function. The use of interchangeable raw materials can lead to a reduction of the number of suppliers, a decrease in defect rates and a reduction in total purchasing costs.

As a consequence of the growing interest in articulating and formalising manufacturing strategies, Carter and Narasimhan (1995:75-82) cite Ettlé who contends that the various essential decisions for future operations are likely to force an integration of design and purchasing. This integration can be affected by a number of factors. These include, amongst others, ownership of the enterprise; management structure; strategic focus of purchasing and product development. Industrial enterprises can no longer afford to view purchasing in a narrow manner, ignoring the potential contributions it can make to their competitiveness at a strategic level. By fully integrating purchasing and design functions into the formulation of competitive strategy, enterprises can achieve optimization of material costs, improved responsiveness and delivery, improved quality and technological advantage.

Value analysis and value engineering provide a significant opportunity for collaboration between purchasing and product designers in a manufacturing enterprise. Bailey and Farmer (1990) suggest that the objective of value analysis and value engineering is to maintain or enhance functional and performance output and reduce the cost input through design simplification, elimination of parts, raw material

substitution and process modification. It is not an intention to dwell at length on this topic, however, it would suffice to say that value analysis and value engineering can result in new materials, more advanced technology, changes in customer perception, design specifications and manufacturing efficiency. Indeed purchasing can make a profound impact. Table 3.4 summarises purchasing and design orientation in respect of the purchasing product.

TABLE 3.4

PURCHASING AND DESIGN ORIENTATION IN RESPECT OF THE PRODUCT

	PURCHASING ORIENTATION	DESIGN ORIENTATION
1	Adequate and acceptable margins of quality, safety and performance.	Wider margins of quality, safety and performance.
2	Use of adequate materials.	Use of ideal materials.
3	Lowest ultimate cost.	Limited concern for cost.
4	High regard for availability.	Limited regard for availability.
5	Practical and economic parameter, specifications, features and tolerances.	Close or near perfect parameters, specifications, features and tolerances.
6	General view of product quality	Conceptual abstraction of product quality.
7	Cost estimation of materials.	Selection of materials.
8	Concern for JIT delivery and supplier relationship	Concern for overall product design.

SOURCE: Adapted from Dowlatshahi S (1992), Purchasing's role in a Concurrent Engineering Environment, *International Journal of Purchasing and Materials Management*, Winter 1992, p 23.

3.13 PURCHASING'S ROLE IN PRODUCT DEVELOPMENT

Purchasers and suppliers provide crucial inputs for product development. Research findings of O'Neal (1993:3-9) indicate that major multinationals are leveraging early involvement to reduce time to market. The purpose of this section is to present a strategic framework for integrating purchasing into a cross-functional product

development system to enable it to contribute significantly to an enterprise's competitive advantage.

Generating a steady stream of new products of superior quality at competitive prices is vital to the survival and growth of most enterprises. O'Neal (1993:4) contends that competitive advantage often results from the ability to reduce time to market and respond quickly to customer demands. Success depends on an enterprise's ability to skilfully gather resources and combine inputs from many sources in a synergistic fashion. Two important resources for new product development efforts are buyers and suppliers. Through early involvement, they proactively participate in new product development teams from the outset. Furthermore Rajagopaul and Scheuing (1995) assert that in leading enterprises, buyers and suppliers play pivotal and interactive roles in structuring, conceptualising and implementing new product processes.

Improving product development presents a unique opportunity to alter the competitive picture in an industry. O'Neal (1993) asserts that despite its promising potential, this is somewhat rare in many enterprises. A review of the literature of O'Neal (1993), Rajgopaul and Scheuing's (1995) suggests that the possible reasons for this reluctance to tackle the challenging task of product development could include:

- product development has not been viewed, managed or taught widely as an integrated cross functional process;
- appropriate concepts, tools and approaches have become available only recently;
- the necessary changes are extensive, require a substantial commitment of resources, and result in complete realignment of responsibilities and working relationships; and
- improving product development requires cultural change, including cross-functional teamwork.

Wheelwright and Sasser (1989:118) maintain that generally all functions should contribute and communicate early on in the process of product development.

Consistent with this William and Smith (1990:315-319) advocate that purchasing should become more actively involved in the process of generating new ideas and in implementing the development efforts. They point to purchasing's central, strategic position with regard to the flow and exchange of information. Purchasing manages the link between the outside supply market and internal functions. Burt and Soukup (1985:90-97) believe that purchasing is in a strategic position to tap into the creative and competitive capabilities of suppliers and to fruitfully engage in product development. Purchasing involvement in the new product development process should begin at the time a new product has been identified and should continue throughout the subsequent life cycle of the product.

3.14 PRODUCT, INFORMATION, PERCEIVED RISK AND BUYING SITUATIONS

Of considerable practical utility to the question of awareness, attitude and buying action is the analytical framework proposed by Robinson, Faris and Wind (1967) in their seminal work *Industrial Buying and Creative Marketing*. This model is based upon two simple classification system, namely, **eight buy phases** and **three buy classes**. It is not intended to be prescriptive, however, it does present a framework from which to approach the buying process.

For the purpose of the empirical study, the important phase is the "**search for and qualification of potential sources**". In describing the search procedure the authors, Robinson Faris and Wind (1967) contend that the first step in the search process is the identification of information sources that are focal points for information about one or more alternatives which might be available. The procedures that are followed in this search are not well understood and little is known about how these information sources are sought and utilised. Generally the search process involves selective perception whereby industrial buyers tend to rely upon certain sources of information and ignore others. An analysis of the value and dimensions of these sources therefore becomes necessary. Table 3.5 reflects the distinguishing characteristics of the buying situation as identified by Robinson, Faris and Wind (1967), the extent of information required for each buying situation and the perceived risk.

From Table 3.5 it can be observed that the buyer's reliance upon and preferences for information sources vary according to the stage in the buying process and in relationship to other factors such as class of buying decision and degree of perceived risk. Implicitly the model presents classes of buying decisions which can be defined by positions on a continuum from simple and routine decisions (habitual behaviour and automatic reordering) to complex decisions making characterised by large amounts of money and significant change from previous practice.

TABLE 3.6

NATURE OF INFORMATION, PERCEIVED RISK AND BUYING SITUATIONS

TYPE OF BUYING SITUATION AND PRODUCT TYPE	INFORMATION: HOW MUCH IS REQUIRED	PERCEIVED RISK
New Task or extensive problem solving. Strategic Product	Maximum Need uncertainty. Performance, procedural and political uncertainty.	High
Modified Rebuy or limited problem solving. Leverage Product	Moderate Market uncertainty. Performance and procedural uncertainty.	Limited
Straight Rebuy or routine problem solving. Low Impact Product	Minimal Very little uncertainty, however, buyers experience transaction uncertainty to a very little extent.	Low

SOURCE: Adapted Model of Robinson, Faris and Wind (1967), *Industrial Buying and Creative Marketing*, Boston: Allyn and Bacon Inc. p 14. and Webster F E (1991), *Industrial marketing strategy*, New York: John Wiley and Sons, p. 289-293.

The buyclasses, straight rebuy, modified rebuy and new task can be likened to Howard and Sheth's description of buying decisions as extensive problem solving, limited problem solving and routinised response behaviour. These categories represent a means of reducing the complexity of a buying situation with the help of information and experience. The categorisation is one based primarily on the amount of information necessary to reach a decision. In **routinised response behaviour** very little uncertainty of any type is present. **Limited problem solving** has both performance uncertainties (doubts as to whether the product will meet the application with the reliability, speed and flexibility desired) and procedural uncertainties (the amount of time to learn to use). In **extensive problem solving** an additional uncertainty is introduced - political uncertainty. This is defined as the problem of getting agreement because individual participants in the buying division have different goals or choice criteria. This simplification process has implication for the amount and type of information required to arrive at a decision.

The above is not purported to be an exhaustive review of the industrial marketing literature on information sources, however, it does represent a detailed discussion of those findings applicable to the research at hand, namely, the strategic use of information sources, influencing buying decisions.

3.15 CONCLUSION

This chapter examined the purchasing product as a strategic variable within a rapidly changing competitive environment. It was noted that on one hand the contemporary business environment is characterised by a low growth mature market. On the other hand an increase in the level of globalisation, technological innovations and consumer sophistication were noted. The mixture of these two, forces the purchasing department to adopt a more strategic perspective. Strategic purchasing can play a crucial role in aiding product development activities and enhance the enterprise's competitive advantage. A different kind of purchasing function should evolve where new kinds of knowledge, skills and intellectual capabilities will be required in all supply management and purchasing activities. This also requires effective

management of the productive and material resources of the enterprise. The effectiveness with which this is done affects cost, quality, customer satisfaction and delivery performance of the enterprise. These aspects of doing business have become the new basis of competition. Consequently, in their relentless pursuit to achieve sustainable competitive advantage, enterprises are viewing the purchasing product as a strategic weapon. In this regard supplier partnerships are viewed as one key element in preparing the enterprise for the demands of world class competitiveness.

CHAPTER FOUR

STRATEGIC SUPPLY MANAGEMENT - SUPPLIERS AS STRATEGIC VARIABLES

4.1 INTRODUCTION

The previous chapter placed the importance of the **purchasing product** as a strategic competitive variable in perspective. Likewise, it is imperative to examine the role of **suppliers**, the management of suppliers and the nature of supplier relations within the context of achieving **competitive advantage**. The nature of buyer and supplier relationships is undergoing dramatic changes. Strategic planning, customer orientation, early supplier involvement, partnership and Just-in-Time philosophy dominate the recent literature of purchasing and supply management. These ideas draw buyers towards a view of their work that is far different from the traditional heavy paperwork, reactive buying actions and price-oriented competition for which the buying community is known.

The cumulative effect of the approaches to purchasing and supply management is overall improvement in product quality, reduced cost of operations and increased competitiveness throughout the economy. Research studies describe these collaborative relationships as partnerships, strategic alliances, teams, clans and chains. As supply relationships are becoming closer, integrated and long lasting, the manner in which enterprises manage their sources of materials and services gives the purchasing function the greatest potential leverage in altering the enterprise's competitive position. In addition the relationship between the buying firm and the supplying firm is an important learning opportunity that an enterprise can be exposed to. The rate at which both the buying firm and supplying firm learns can also be a source of competitive advantage. Within this context this chapter examines the new initiatives in buyer-supplier relationships in an effort to reconcile the needs of quality, cost reduction, innovation and ultimately customer satisfaction. However, an important aspect of this chapter is the role of purchasing and materials management

in the provision of a better fit to the emerging needs of the enterprise.

4.2 BUYER-SUPPLIER RELATIONSHIP - A STRATEGIC IMPACT

The way in which the buying and supplying enterprise do and should interact with each other has been an area of research interest for many years. Patterson and Forker (1995:358) contend that "*buyer-supplier relationships have long been a popular topic of purchasing, industrial marketing, strategy and policy research due to their importance in promoting desired economic behaviour from suppliers and customers and in managing the inefficiencies of the exchange process that can increase the cost of conducting business.*" Researchers concerning themselves specifically to strategic supplier partnering, amongst whom one can include, Ellram and Hendrick (1993), Smeltzer (1995), Patterson and Forker (1995), Storto (1995) and Turner (1997) have described and analysed the shift from traditional, adversarial, arm's length buyer-supplier relationships towards longer-term, more co-operative relationships in which the buyer and the supplier tend to regard each other more as equal partners. In this regard Ellram (1995:36) contends that "*while the manner in which buying and supplying organizations interact has long been a topic of interest, in recent years the focus has shifted. Today, buyer-supplier partnerships or strategic alliances are a popular topic of coverage...*" The above-mentioned authors have also distinguished between two extremes of buyer-supplier behaviour, namely the **competitive-coerce approach** and the **co-operative collaborative approach**.

Hendrick and Ellram (1993:14-15) point out that the **competitive-coerce model** juxtaposes buyers and suppliers against each other to haggle over price and other terms and conditions of the purchase and sale. The focal point is on current transaction rather than the relationship between the two entities. Both parties may be satisfied with the results of the transaction or one may dominate the other as a result of their relative market power. Supplier switching is the norm and the lowest price rather than total cost of acquisition and ownership is usually the dominant variable. However, in the **co-operative collaborative model**, the authors maintain that buyers and suppliers believe their mutual competitive strength and co-destiny is enhanced by

a long term close, and often monogamous (single source) relationship. Here the focus is on the relationship rather than on individual transactions. If the relationship is right, the transaction that occurs between the buying and supplying enterprises will be competitive and perhaps provide an extra competitive advantage. There is no differentiation that exists between internal and external supply of material, equipment and services. The buying enterprise has chosen to outsource rather than make or supply internally because of the expertise and lower cost of the supplier. Supplier switching rarely if ever occurs and the total cost of acquisition and ownership dominates lowest price as the major decision variable.

The growth and attention on **co-operative-collaborative model** (strategic supply partnering) is evidenced by the increasing number of articles that discuss and define this relationship in purchasing. Spekman (1988:75-81) discusses both the term strategic alliances and collaboration specifically as they relate to the purchasing function. He states that strategic alliances are long term relations with a few suppliers, close interaction between a number of different function boundaries, supplier proximity and blanket contracts. Collaboration is seen as a process by which partners adopt a high level of purposeful co-operation to maintain a trading relationship over time.

Spekman (1988:75-81) further points out that the relationship is bilateral, has built-in mechanism for conflict resolution, is based on a win-win ideal and open channels of communication and requires co-ordination of work planned into the future. Within this context, Hendrick and Ellram (1993) discuss three type of purchasing relationships, namely, arms length, supportive and coalitional. A self explanatory summary of the relationships is tabulated in Table 4.1.

TABLE 4.1
PURCHASING RELATIONSHIPS WITH SUPPLIERS AS ESPOUSED BY
HENDRICK AND ELLRAM

TYPE	CHARACTERISTICS
Arm's length	Supplier is chosen for tangible reasons, generally cost-related. The enterprise uses competitive bidding, each time contract comes up.
Supportive	Supplier is chosen for tangible reasons, generally not cost. Short to medium term contracts, renegotiation rather than competitive bid.
Coalitional	Supplier generally chosen for tangible and intangible reasons like corporate culture or strategic fit with the enterprise. Relationship is characterised by sharing of risks and rewards. Long term indefinite time horizon.

SOURCE: Adapted from Hendrick T, and Ellram L (1993), *Strategic Supplier Partnering: An International Study*, Tempe: Centre for Advanced Purchasing Studies, p 15.

Hendrick and Ellram (1993) maintain that a shift is taking place from arm's-length relationships with suppliers to closer, carefully targeted strategic relationships. This shift is necessitated by the new realities of competition and markets. Macbeth (1994:19) contends that the "... *advent of Just-in-Time, lean production, total quality and partnership sourcing, many organizations have embarked on two change processes of major importance to the purchasing function.*" He further suggests that enterprises have reduced the number of suppliers in their supply base and at the same time changing the way in which they do business with remaining suppliers. What is very clear is that partnering is not just a purchasing issue. It is a different way of doing business. Macbeth (1994:25) concludes: "... *the business relationship can be seen not simply in terms of and exchange of goods for payment but as the basic building block of a network of interacting and interdependent groups.*" Managing the relationship to deliver both short term operational and medium to long term strategic benefits requires new skills.

4.3 STRATEGIC IMPACT OF PURCHASING PARTNERSHIPS

In discussions relating to co-operative-collaborative models the term partnership is

often used. It does not mean a partnership in the context of a legal form of business ownership, subsidiaries or joint ventures but an intense co-operative-collaborative relationship between buying enterprises and strategic suppliers. Ellram (1995:37) presents a definition of partnering relationship "*... as a two way relationship involving a mutual exchange of ideas, information and benefits.*" Graham, Daugherty and Dudley (1994:13) contend that "*the recognition of the potential to be gained through communication and co-operation has prompted many firms to move away from an adversarial buyer-seller stance. Instead, efforts have focused on managing purchasing relationships in order to contribute to strategic success. This contrasts sharply with the traditional perspective of viewing purchasing as a tactical manufacturing subfunction.*"

Developing effective purchasing partnerships is a complex process requiring a long-term commitment. These relationships are usually classified as transactional exchanges, relational exchanges and Just-in-Time exchanges. Transactional exchanges are characterised by the use of multiple sources of supply, frequent switching of suppliers, lack of long-term commitment of the parties to the relationship and emphasis on short term criteria such as price, delivery and quality in the selection of suppliers for each specific need.

Relational exchanges use few or just one source of supply for each purchased item, rarely switch suppliers and require strong mutual and long term commitment of trading partners to the exchange relationship. Just-in-Time exchanges represent a phase beyond relational exchanges where the two trading partners closely integrate their day-to-day operations, thereby sacrificing independence in favour of efficiency.

Joag (1995:406) states that "*managing relational exchanges through supplier partnerships can be defined as the strategic establishment, systematic maintenance and proactive enhancement of close, mutually beneficial long term business exchange relationships with limited number of carefully selected partner enterprises.*" Such relations are indeed mutual and equally meaningful to both buyer and seller. Supplier partnerships are expected to guarantee the supply of quality

inputs in required candidates at stable prices essential to meet the onslaught of the competition. Better planning reduces the need for large inventories and the smaller number of suppliers and the resultant increased size of orders would generate economies of scale that would reduce the cost of items purchased. Furthermore, the energy that an enterprise expends in managing numerous transactions can be directed into other strategic purchasing activities.

4.4 A NEW EMPHASIS: THE STRATEGIC MANAGEMENT OF SOURCES OF SUPPLY

As the emphasis of the enterprise is changing, the purchasing process must also change. Purchasing must ensure that its sources of supply are capable of meeting the new requirements demanded by the market and the production department. This results in a drastic departure from the traditional view of the buyer and seller relationship in many respects. According to Heinritz et.al. (1991) who assert that as a result of the diversity of expectations and objectives of the enterprise, buyers seek to find the best possible source of supply for their respective needs. The best is defined in terms of relationships. They further suggest that in repetitive purchasing situations, such as straight or modified rebuy, where buyers are familiar with current suppliers and the purchase product is a standardised one, it may be a simple matter of choosing a supplier from a list of sources already identified, evaluated and probably certified. However, in a new task situation, or when the purchase involves a substantial expenditure or the quality of the needed product is critical, the selection may involve an extensive search to find the one qualified supplier. In the event of there being no current source of supply, the enterprise may work with many suppliers to develop the needed product.

The management of the sources of supply is viewed differently in different enterprises. Some enterprises view it as infrastructural while others view it as part of the value chain relating to material flow. According to Van Weele (1994:4-5) purchasing and supply management affects much more than material flow along the value chain. In this regard Gadde and Hakansson (1993:1-4) suggest that the core of

the new paradigm is a shift in the basis for supplier selection from the product/commodity based decision to the supplier capability based decision and from the power based relationship to co-operation based relationship. The capability and co-operation based supplier relationship calls for a totally different supplier selection criteria. The traditional criterion for supplier selection is based on the assumption that multiple suppliers will be given well defined set of product specifications for their examination and subsequent bidding or quotation. The buyer examines the suppliers' bidding sheet and evaluates their proposal in terms of cost, delivery capability and quality conformance. The final selection decision is based on how well the chosen suppliers will conform to the set of requirements.

Table 4.2 summarises the old and new purchasing emphasis from a supply management perspective. Four relevant factors have been identified and these include; supplier selection, supplier relationship, type of sourcing and relative power.

TABLE 4.2
A SUMMARY OF THE OLD AND NEW PURCHASING EMPHASIS RELATING TO SUPPLIER RELATIONSHIP

RELEVANT FACTORS	OLD PURCHASING EMPHASIS	NEW PURCHASING EMPHASIS
Supplier selection	Product/commodity based	Capability based
Supplier relationship	Adversarial	Co-operative
Type of sourcing	Multiple sourcing	Selected sourcing
Relative power of buyer and supplier	Buyer > Seller	Buyer = Seller

Table 4.2 suggests that the new purchasing emphasis translates the function of the buyer into a different set of supplier selection criteria. The buyer will consider, among others, the following factors associated with the supplying firm: the management capability; technology development; production operation and quality administration. Indeed the new emphasis involves such elements as the use of long term contracts, reduced number of supply sources and a high degree of mutual trust

between the two parties. This strategic partnership was defined earlier as a mutual ongoing relationship involving a commitment over an extended period and a sharing of information and the risks and rewards of the relationship.

In contrast with the partnership approach, traditional purchasing typically involve the use of multiple sources for major materials, with relatively short term contracts awarded on the basis of competitive bidding. The rationale is that multiple sources can provide quick recovery in the event of supply problems or sudden schedule changes. Multiple sources can provide competitive price pressures. However, It is the contention of Hahn, Kim and Kim (1986:2-7) that multiple sources can be costly to maintain simply because of the repetitive nature of the bidding process. They further argue that technology sharing is usually limited, joint development work is virtually non-existent and new product work is usually placed with suppliers largely on the basis of low bids. Investment by suppliers in research and development and process improvement is usually limited to that which can be economically justified within the duration of the contract. Harrington (1987:155) adds that multiple sourcing "*introduces sources of variability which is the nemesis of consistent and high quality incoming material.*"

The essential characteristics of purchasing alliances are:

- when purchasing is involved in strategic alliances, it has broad range of responsibilities within the enterprise, often including team involvement;
- supplier-oriented strategic alliances are characterised by good communication, team work between buyer and supplier and co-operation;
- purchasing personnel involved in strategic alliances should perceive themselves as having a relatively high status within the enterprise; and
- purchasing-oriented alliances tend to evolve over time rather than be static. Similarly the role of the purchasing function in the alliance changes over time. It begins very intensely in screening and

establishing the relationship. If things go well, it may have more of a monitoring role.

Joag (1995:412) concludes that "... *the principal benefit of supplier partnerships is to transform the purchasing function from reactive buying to proactive co-ordinating of the suppliers' and company's technical capabilities to enhance its competitiveness.*"

4.5 USING A SINGLE SUPPLIER - A STRATEGIC VIEWPOINT

Newman (1988:10-17) presents a distinction between single sourcing and sole sourcing. The former implies that multiple suppliers are available but the buyer selects and is utilising one supplier. The latter implies that only one supplier is available and the buyer is using that supplier. Deming (1986:23) and Porter (1980:124) offer contrasting views on single sourcing and purchasing performance.

Deming (1986:23) cautions: "... *end the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust.*" In contrast, Porter (1980:27) warns that: "**purchasing everything from one supplier may yield that supplier too much of an opportunity to exercise power.**" To display this Porter (1980:124) suggests that the supplier can "... *raise prices or reduce the quality of purchased goods and services.*" In this view single sourcing results in lower quality and higher costs, as well as less co-operation and greater buyer dependence, largely due to lack of competition among suppliers. Table 4.3 reflects a contrasting summary of Deming (1986) and Porter (1980) points of view on single sourcing.

TABLE 4.3
CONTRASTING DEMING'S AND PORTER'S VIEWS OF SINGLE SOURCING

IMPACT OF SINGLE SOURCING	DEMING	PORTER
Product Quality	Increase	Decrease
Total Costs	Decrease	Increase
Buyer/Supplier Co-operation	Increase	Decrease
Buyer Dependence	None	Increase

In examining the benefits of using a single supplier, there appears to be a division in thought. Ramsay (1990:2-5) believes that the co-operative single source is a myth and advises buyers to only use single sources when the source is at a serious power disadvantage. In the same breath Ramsay and Wilson (1990) assert that multi-sourcing should be adopted whenever possible. Newman (1989) concedes that single sourcing may yield buyer dependence but at the same time argues that it can lead to more co-operation between buyer and supplier, better product quality and lower costs. Leenders and Blenkhorn (1988) develop the reverse marketing concept as a co-operative approach for creating an outstanding single source supplier. They also view multiple sourcing as admission that outstanding sources are not available. Tullous and Utecht (1992) argue that a good single source offers improved quality and better prices in the midst of a strong buyer-seller relationship. Dummond and Newman (1990) discuss single sourcing as a technique for developing more co-operative and closer relationships which could lead to a number of benefits, such as greater delivery of reliability, fewer incoming defectives, lower lead times and higher inventory turnover. Hong and Hayya (1992) present the benefits of single sourcing in the context of total quality management and just-in-time purchasing.

Results of a research conducted by Larson (1995:187) generally support Deming's (1986) viewpoint that single sourcing has shown to lead to higher quality, lower costs and buyer-supplier co-operation, without increasing dependence of the buyer on the supplier.

4.6 DEVELOPMENT OF LONG TERM SUPPLIER RELATIONSHIPS

According to Van Weele (1994:138), "*Relationships with suppliers develop over time. The situation in which the supplier delivers to a producer may occasionally, over time, expand into a 'supply partnership' or even 'design partnership'*". Gadde and Hakansson (1993:65-85) suggest that the trend towards longer term relationships is growing steadily in importance. The development of long term relationships represents the selection and continuous involvement with suppliers that the buying function views as critical over an extended period, namely five years and beyond. Suppliers selected for long term relationships should provide a competitive advantage to a buyer in terms of cost, quality, technology development and other critical performance areas. There are numerous factors associated with long term relationships. Potential long term suppliers must be capable of improvement in key performance areas and be willing to develop a close working relationship with the buyer. In view of the accelerated rate of technological change within many enterprises, the development of closer buyer-supplier relationships is critical for establishing technological synergy between buyer and seller. In this regard Gadde and Hakansson (1993:69) point out that "*Buyers and sellers on industrial markets have plants and equipment with specific technical attributes, and their relationships are intended to bind them to one another effectively.*"

Long term relationships have certain characteristics that differentiate them from a typical purchase arrangement. These include, *inter alia*:

- there is a joint sharing of purchased item and product development costs;
- a complete and mutual trust between buyer and seller exists;
- there is minimal need for lengthy contractual agreements;
- the buying and selling enterprises share cost savings resulting from performance improvement efforts;
- there exists an agreement and understanding concerning intellectual property rights;
- the price of the purchase item is expressed as the suppliers true cost

- structure rather than what the market will bear;
- relationship between supplier and buyer remains positive even through difficult economic circumstances;
- there is a commitment to the mutual benefit of buyer and seller;
- the long term contracts cover the life of an item or product;
- there is a mutual commitment to joint performance improvement over time; and
- there is sharing of technology or personnel as needed.

Furthermore to remain competitive there needs to be an emphasis on total quality improvement initiatives with suppliers who reflect a need for continuous quality improvement. A supplier's ability to identify and resolve problems along with a philosophy that defects are not acceptable at any stage of the design and manufacturing process are also cornerstones of buyer/seller quality improvement efforts.

4.7 COST AND PRICING IN A PARTNERSHIP RELATIONSHIP

Knowing the cost of a particular product and its manufacturing process is vital to efficient management. Determining the cost of the purchasing product is not as simple as it might first appear as the term cost/price has many meanings. Cost-based pricing is an innovative approach to determine price/cost over the life of the purchased item. Its application can begin with target prices for new products and should continue through the product life cycle. In cost-based pricing, negotiation and bargaining focus on elements of the supplier's cost structure such as labour, materials, overheads and profit for the purchase item. This approach, which offers the potential to foster a higher level of co-operative effort between the buyer and seller, has as its primary objective supply base performance and improvement and continuous cost reduction. Cost based pricing enables buying and selling enterprises to focus on actual cost reductions over time while reducing the conflict typically associated with pricing approaches focusing on profit-margin levels.

A true cost-based pricing approach actively promotes co-operative behaviour between buying and selling enterprises. Purchase and selling prices, established through partnership, reflect agreed upon return-on-investment, productivity and sharing goals associated with cost savings. Cost-based pricing is not market-based pricing. In a market-based approach, advantage moves from the buyer to the supplier or from the supplier to the buyer depending on the circumstances of supply and demand, level of product differentiation and the number of enterprises involved within a market. In this regard, Monczka and Trent (1995:43) strongly contends that "*A buyer and seller's agreement on the supplier's full cost to produce an item is the foundation of a cost-based price. Additionally, joint assumptions and agreement on product cost, production volumes, quality and quality improvement requirements, targeted costs, quantifiable productivity improvement projections, specific cost content definition and contractual sharing of savings are essential.*" Compared to the traditional approach to pricing, agreeing on these issues requires a higher degree of trust, information sharing and problem solving between buyer and supplier. Indeed, the successful execution of cost-based pricing requires the establishment of joint performance improvement targets. This is what drives continuous improvement and actual cost reduction over time. Cost-saving sharing takes effect once a supplier achieves agreed upon targeted improvement levels.

Monczka and Trent (1995:44) further argue that "*Significant competitive and self-interest motivations are at work within a cost-based pricing framework.*" Relationships within this context will strengthen as both buyer's and seller's products become more competitive in the market place. Performance improvement will result from a better understanding of requirements, information sharing between enterprises and the continuous reduction of supplier's product cost structure. A cost-based pricing approach should also result in reduced transaction costs between a buyer and seller over time. Finally, the expected emphasis on a cost based approach to pricing reflects a need to develop innovative ways for achieving cost reductions.

4.8 SUPPLIER STABILIZATION PROCESS: A NEW EMPHASIS

One of the purchasing function's basic objectives is to maintain a network of capable suppliers. As enterprises concentrate on their core competencies, they become more dependent upon suppliers' efforts to meet increasing competition. To compete in their respective markets, the buying enterprise must ensure that their suppliers' performance, capabilities and responsiveness is equal to, or greater than that experienced by competitors with their suppliers. In this regard Krause and Ellram (1995:384) contend that many buying enterprises actively facilitate supplier performance and capability improvements through supplier-base optimization. Supply-base optimization is the process of determining the number and most appropriate suppliers a buying enterprise should maintain. It requires the elimination of suppliers not capable of achieving the required performance levels, either currently or in the near future.

Monczka and Trent (1995:44) contend that supplier reduction "*is a continuous effort that strives for the optimal number of suppliers capable of meeting the performance levels of the buyer.*" This process requires detailed analysis of supplier capabilities and the number of suppliers required currently and in the future for each purchased family item. A literature survey suggests that the primary goal of optimization is usually a reduction of the overall supply base accompanied by improved cost, quality and delivery capability of suppliers. While many activities, when performed properly, offer an opportunity to improve supply-base performance over time, certain activities can increase supplier performance contribution and improvement at an accelerated rate. These activities include: Early supplier involvement in design; Direct supplier development; Supplier performance improvement rewards.

Early supplier involvement in design recognises that competent suppliers have more to offer a buying enterprise than simply producing an item according to established specifications. Early supplier involvement, which is part of a simultaneous engineering approach between buyer and seller, seeks to maximise the benefit received from a supplier's engineering, design, testing, manufacturing and tooling

capabilities. This approach represents a direct effort to reduce total product development cycle time and cost by using key suppliers early in the design process. Reducing time throughout the new product development process is a competitive necessity. The total cost commitment made during the conception and engineering phases of new product development can be appropriately managed. The logic behind early supplier involvement is that qualified suppliers can provide insight into the production process required for purchase items and can reduce total development time.

Direct supplier development requires a direct commitment of resources by the buying enterprise for the improvement of an existing supplier capability or the development of a new performance capability. Direct supplier development support involves providing additional business, capital, equipment, technology and personnel to improve supplier capabilities. This differs from indirect supplier development that stresses supplier encouragement, training, increased performance goals and self improvement. Direct supplier development strategies are hesitantly implemented since buyers consider the possibility that competitors may benefit from supplier's capability improvement. However, Monczka and Trent (1995:56) argue that enterprises "*... currently pursue supplier development primarily through increased supplier performance goals, required supplier capability improvements, enhanced working relationships with suppliers and formal education and training programs.*" Indeed supplier development activities require a mutual recognition of the need for continuous performance improvement.

Supplier performance improvement rewards is an approach that relies on rewards and incentives to achieve continuous supplier capability improvement. Traditionally, buyers have sought performance improvements from suppliers, particularly in the area of price but were unwilling to share the resulting benefits. As a result, this approach encouraged suppliers to avoid sharing improvement information or savings with the buyer. As increased awareness exists among enterprises of the performance contribution that a progressive purchasing function and world class supply base can make towards competitive advantage, the challenge for most buying department is to

develop and implement aggressive approaches to maximize supplier contribution and capability improvement.

4.9 THE SUCCESSES AND FAILURES OF PARTNERSHIP RELATIONS

Ellram (1995a:36-44) surveyed 300 "Fortune 500" enterprises in a study that focused on partnering pitfalls and success factors. Ellram (1995a:37) criticises previous research on partnership stating it "*... looks at partnering from the outside, is based on secondary data, explores partnering relationships from only one side of the partnering dyad, or that it uses a very small sample or a case study approach.*" Her study focuses on partnering from the perspective of both buyer and supplier. Her sample were matched pairs of buyers and suppliers that mutually agreed they were involved in a partnering relationship. She provides empirical reasons why enterprises seek to enter buyer-seller partnerships, why such partnerships succeed and why they fail. Table 4.4 tabulates the Ellram's findings in respect of reasons why buyers and suppliers engaged into a partnering relationship.

An examination of Table 4.4 suggests that price, quality and delivery feature in the top four reasons for buying enterprises entering a partnership arrangement. These have traditionally been the three most important supplier selection factors. The strategic factors such as gaining access to suppliers' technology and support for Just-in-Time initiatives were further down the scale. This is indeed surprising. However, Ellram (1995a:39) argues that buying enterprises can get the desired Just-in-Time results and the use of technology in other regular long term relationships. The number one reason for suppliers engaging in a partnership arrangement is to secure a reliable market for a given product. The desire to influence the customers' quality rated number two. The big gap between buyers and suppliers in ranking of important reasons for entering partnerships is related to Just-in-Time initiatives. Suppliers see the buying enterprise's drive toward a Just-in-Time initiative as more important issue in partnering than the buyers.

TABLE 4.4

REASONS' FOR PARTNERING RELATIONSHIPS ACCORDING TO ELLRAM

BUYERS' REASONS		SUPPLIERS' REASONS	
	RANK		RANK
Price/Total cost of delivered items	1	Secure reliable market for this item	1
Secure reliable sources for product	2	Desire to influence customers' quality	2
Desire to influence supplier's quality	3	Support customers' JIT initiatives	3
Desire to influence Delivery schedules	4	Desire to improve forecasts of requirements	4
Desire to influence/gain access to suppliers' technology	5	Reduce ongoing administrative procedures and costs	5
Reduce internal procurement procedures and costs with RFQ	6	Reduce internal sales procedures and costs with RFQ	6
Support JIT initiatives	7	Price able to receive for this item	7
Reduce ongoing administrative procedures and costs	8	Desire to influence/gain access to customers' technology	8

SOURCE: Adapted from Ellram L (1995a), Partnering Pitfalls and Success Factors, *International Journal of Purchasing and Materials Management*, Spring 1995, pp 38-39.

Ellram (1995a:38-39) suggests that the key factors for establishing successful partnerships are two way information sharing; top management support; shared goals; early communication to suppliers; and suppliers adding distinctive value. However, poor communication, lack of trust, poor up front planning and lack of shared goals are considered reasons why partnerships have not worked or dissolved.

4.10 SUPPLY CHAINS AND PARTNERSHIPS

In a time of shortening product life cycles, complex partnerships arrangements and a quest for customer service, it is necessary to consider the complete scope of supply chain management from supplier of raw materials through factories and warehouses to demand in a store for a finished product by consumers. Supply chain is another term used to portray this co-operative link in the buying and selling process, from the daily transaction to long-term research and product offerings. Various authors have described the supply chain concept differently. Most definitions describe the supply chain as a flow of goods from the supplier through the manufacturer and distributor to the end user. Some definitions while staying within the same context, add other elements to the basic framework. Cooper and Ellram (1993:13) define supply chain management as *"an integrative philosophy to manage the total flow of a distribution channel from the supplier to the ultimate user."* Cavinato (1991:10) discusses the process of supply chain management as consisting of a group of actively managed channels of purchasing and distribution. The essence of supply chain management is greater co-ordination of processes and activities of the enterprise, such as inventory management across the entire channel.

Supply chain management is an evolving concept in the purchasing and logistics areas. Purchasing can be a significant player in supply chain development and management. It is the start of the supply chain and therefore it is a critical link. The supply chain management further helps the purchasing function to move from an acquisition orientation mode to a strategic mode. Partnerships represent a movement towards a strategic posture, however, partnerships with suppliers only represent one part of the supply chain.

The success or failure of both supply chain management and supplier partnerships depends upon having individuals within the buying function with dynamic attitudes to act as agents of change. Open and free communication between the links in the chain are the key to the success of supply chain management.

It is not an intention to dwell at length on supply chain management. However, it suffices to say that the three major reasons for forming supply chains identified in the literature survey cited earlier are firstly, to reduce inventory investment in the chain. Secondly, to increase customer service and thirdly, to help build a competitive advantage for the channel. Many functions and enterprises must be involved in the effort to reduce inventory. Better information systems can curtail the need for large safety stocks of production inputs and finished goods. These eventually result in a better quality product offered to the customer.

4.11 TOTAL QUALITY MANAGEMENT AND SUPPLIER RELATIONSHIP

Van Weele (1994) contends that supplier partnerships are both an ingredient and a result of total quality management. Conformance to customer expectations, a common definition of quality, requires that each stage in the value added production process conform to specifications that are based on these expectations. All processes, both the supplier's and the manufacturer's must be in control and possess minimal variation. This results in a reduction in expense and time associated with inspection. This ultimately results in lower overall costs through the reduction of rework and scrap and increased productivity. In a sense, the supplier becomes an extension of the buying enterprise's process and a partner in the total quality effort as perceived by the ultimate consumer.

According to Van Weele (1994:148-149) total quality management generally refers to a system of management whose primary objective is customer satisfaction. The historical definition of quality has been extended to include supplier produced materials. Quality management and partnerships or strategic relationship with suppliers are bonded in such a way that each customer's quality expectation within the chain is satisfied with the least effort. The customer is anyone who receives a product from a previous person in the supply chain. Total quality management system begins with top management commitment and leadership. Management determines the total quality vision and plans for the organisation and must review and encourage its progress towards the achievement of total quality. Stuart and Mueller

(1994:15-16) cite the report to the American House of Representative. The report contains the management practices on how American enterprises improve performance through quality efforts. These practices include:

- quality concepts must be clearly articulated and thoroughly integrated throughout all activities of the enterprise;
- enterprises need to focus on employee commitment to continuous quality improvement;
- total quality management systems must be based on a continuous and systematic approach of gathering, evaluating and acting on information as it relates to customer satisfaction;
- suppliers should be made full partners in the quality management process, developing close working relationships with buying departments.

Stuart and Mueller (1994:16) outline that "*TQM, as it is developing in the United States, has been modelled after the Japanese system of total quality control (TQC)...*" and the well recognised tools and methods that are used to support continuous process improvement are "... *variance reduction and increased customer satisfaction - major ingredients of world class competition.*" Van Weele (1994) suggests that the key element of total quality management is supplier partnership which provides a fertile environment for constant improvement during the course of the product life especially in a rapidly changing technological environment.

4.12 SUPPLIER-RELATIONS AND THE IMPLEMENTATION OF ELECTRONIC DATA INTERCHANGE

The American National Standards Institute (ANSI) has taken a leadership role in promoting electronic data interchange by establishing a committee to develop standards for data transmission. These transmission and format standards are designed to meet the various needs to different industries and applications. The American National Standards Institute in effect standardized transmission procedures. As such, they make it easier for different enterprises' computers to "talk with each

other," and they facilitate the eventual development of electronic data interchange networks involving large numbers of buying and selling enterprises. The American National Association of Purchasing Management has adopted the recommendation of its Computer Information Systems and Technology Group and has recommended that its membership utilize the American National Standards Institute standards for electronic data interchange transmissions whenever possible. It is clearly beneficial for an enterprise to utilize these standards because they ensure the possibilities for future expansion and flexibility. Discussions held with South African industrial buyers suggest that several leading enterprises have adopted electronic data interchange systems. This is confirmed by Hugo, Van Rooyen and Badenhorst (1997:37).

It is not an intention to dwell at length on electronic data interchange and it needs little introduction. It would suffice to say that electronic data interchange (EDI) is the direct electronic transmission, computer to computer, of standard business forms between two enterprises. In the purchasing environment, documents are transmitted "over the wire," eliminating the need to generate hard copies and to distribute them manually. By utilizing electronic data interchange in purchasing, a buyer and a supplier are operating in a near 'real-time' environment, which can reduce incoming material delays by shortening procurement lead times. According to Sriram and Banerjee (1994:31) "*Some researchers predict that by modifying an organisation's structure and work processes, EDI can improve the way the firm does business, and subsequently it will become an essential technology for the firm. Some argue that the economics of EDI are so compelling that no firm today can ignore the competitive opportunity.*"

According to Monczka and Carter (1989:26-33), the growing popularity of electronic data interchange is due largely to four factors: the emergence of a broadly accepted standard computer language; the development of relatively inexpensive computer hardware; the growing proliferation of electronic data interchange software; and finally an increasingly competitive purchasing and manufacturing environment.

Lysons (1991) asserts that by utilizing electronic data interchange in purchasing, for all practical purposes, a buyer and a supplier work together in a 'real-time' environment that has the potential to reduce costly incoming material delays by shortening procurement lead times. Communication becomes more timely and more efficient. This allows the buyer and the supplier both to become more market reactive, thereby strengthening their competitive position.

Automation of purchasing activities through the use of electronic data interchange reduces the total cost of purchases, and thereby positively impacts on profitability. Sriram and Banerjee (1994:32) contend that electronic data interchange creates a paperless purchasing environment, reduces administrative and clerical needs, reduces inventory levels, improves data accuracy, and generally increases purchasing productivity. Furthermore they argue that these benefits have been demonstrated in practice as proven advantages of electronic data interchange operation. What cannot be ignored, however, is the profound impact electronic data interchange has on a manufacturing operating system. In addition to its use in purchasing, the electronic data interchange technology can be transferred and adapted for use by a variety of operating units within an enterprise. The electronic data interchange logic supports Just-In-Time manufacturing concepts, automatic identification systems (bar coding), statistical process control and other efforts designed to more fully integrate the materials management and manufacturing systems. The ripple effect initiated by electronic data interchange implementation likely will be felt throughout the enterprise.

The implementation of electronic data interchange, like any other planned innovation, is considered a change process. Personnel with implementation responsibility should be aware of two major considerations that can influence the success of their efforts. Firstly, electronic data interchange implementation will affect a number of other functions within the enterprise, secondly, there are principles established through an examination of numerous electronic data interchange implementation that are useful in guiding this organizational change.

Before any implementation efforts begin, an analysis needs to be conducted to determine if a reasonable electronic data interchange opportunity exists. Some key indicators of such an opportunity in the purchasing environment include:

- is there a high volume of paperwork transaction?; What are the number of suppliers?;
- is there a long internal administration lead time associated with the purchasing cycle?;
- is there a desire for personnel reduction or avoidance of new hire, or both?;
- and
- is there a need to increase the professionalism of purchasing personnel?

The activities that underly these indicators are cost factors to the enterprise that could be positively impacted by the successful implementation of electronic data interchange. If the perceived benefits appear to outweigh the associated costs, an electronic data interchange opportunity does exist and should be actively pursued.

The question that needs to be addressed is what impact does electronic data interchange will have on the internal systems of the enterprise and the business relationship between a buyer and his or her suppliers. Electronic data interchange implementation can be linked to a total systems integration effort within the materials management and manufacturing functions, targeted towards eliminating clerical duties and operating on a real-time basis. The market sensitivity that a real-time system yields enhances the competitive position through an increased responsiveness to customer needs. A supplier linked to a buyer's production planning and control system by electronic data interchange can be used effectively to enhance the buying enterprise's market responsiveness.

If the analysis yields a positive electronic data interchange opportunity, the first critical job for key purchasing and materials managers is to develop broad-based support within the enterprise for the electronic data interchange project. This includes the support of top management personnel and the key functional managers

whose areas will be appreciably impacted by electronic data interchange, namely, accounting, auditing, legal and information systems. To successfully implement electronic data interchange, it is critical that management support be strong enough to overcome the expected organizational barriers to change. The acquisition of top management support hinges largely on the ability to demonstrate effectively the role electronic data interchange will play in the enterprise's current and long-term purchasing strategy. Typically, management is also concerned about the plan for implementation: the allocation of scarce managerial resources, the availability of technical expertise, and the development of supplier support for the electronic data interchange effort. Each of these areas must be addressed effectively in order to gain top management support for the project.

Bailey and Farmer (1990) contend that the complete support from purchasing personnel is absolutely necessary for a successful electronic data interchange implementation. The purchasing function is the major use of the electronic data interchange technology, and is the primary interface with participating suppliers. Purchasing support can best be gained by fostering an awareness of the electronic data interchange technology within purchasing; soliciting input from departmental personnel concerning the implementation plan and schedule; and involving key purchasing personnel in the design and development of the electronic data interchange system.

A formalized cost-benefit analysis is mandated for any technological adoption of this magnitude. A detailed list of costs and benefits should be identified, and each item should be included before and after electronic data interchange comparison. The various cost categories can be classified as either one-time fixed development costs or variable ongoing system operating costs. The savings expected to accrue through use of the electronic data interchange system can similarly be categorized as one-time or recurring. It is important to think in broad, long-range terms when anticipating the potential end results of such a system.

Monczka and Carter (1989) stress that a broad-based implementation of electronic

data interchange essentially requires that both the buyer and the supplier act as "facilitators of change." The responsibilities of the buyer and the supplier must be defined. Then an implementation plan must be agreed on. The plan should include factors such as the transactions to be computerized; the maintenance of data integrity; supplier responsibilities; appropriate education and training; and a detailed implementation schedule.

Finally, research undertaken by Sriram and Banerjee (1994:39) found that "*EDI policy for purchasing transactions has no impact on the changes created by EDI in purchasing activities, and the buyers were not unhappy about less frequent personal contact with suppliers ...*" However, the research findings also suggest "*... buyers would function cautiously in an electronic environment and would not reduce monitoring and control of supplier performance.*"

4.13 CONCLUSION

This chapter examined suppliers as a strategic variable. The concept of partnership which is based on co-operation and trust has evolved to improve design, quality, delivery and manufacturing operations in an attempt to gain competitive advantage. Strategic supplier partnerships and supply chain management have broad implications for purchasing management. As the role of purchasing and supply management shifts from service provider to a more strategic role, purchasing and supply management will be recognised as a core competence of an enterprise. Enterprises will be able to distinguish themselves from their competition through their purchasing and supply management competencies. Quality assurance was identified as an important criterion for supplier selection. The literature survey reveals some of the purchasing related changes associated with electronic data interchange and the impact of electronic data utilisation on the effectiveness of purchasing performance and supplier relations.

CHAPTER FIVE

TARGETING PURCHASING FOR PROFITABILITY: FOCUSING ON STRATEGIC ISSUES

5.1 INTRODUCTION

The previous chapters indicated that purchasing can become a key contributor to an enterprise's competitiveness. It has also been suggested that this can be achieved if purchasing moves away from transactions to relationships. In addition, purchasing should reinvent itself to fit its new role as strategic sourcing leader. By continuously enhancing its skills mix and the performance of its resource base, it should become a driving force for change that is altering the way enterprises do business. It is true that traditional enterprises having bureaucratic structures can become dysfunctional if they fail to change with the times. Furthermore, the modern enterprise's main focus is on customers. As such enterprises should concentrate on processes, not tasks; value creation, not bureaucracy; and integration, not separation of functions.

Indeed, enterprises now face a transition between the new and the old, between the past and the future, between the less efficient and the more efficient, between products and services that just get by and those that are world competitive, and for some enterprises, between prosperity and stagnation. This is the essence of industrial change. To most observers, the purchasing profession is one of the fastest changing professions within business enterprises. Within this context, this chapter by way of **summary**, considers the future role of purchasing. In addition, it will concentrate on those major changes in the purchasing paradigm that may unfold in the years ahead, such as integrated supplier relations, team purchasing, supply management alliances, supplier managed inventories, internet purchasing and supply chain management.

The purpose of this chapter is to generate some further strategic issues that should be considered for the empirical study. Rather than to describe the problems of industrial

purchasing management, this chapter further stresses what is new and defines the direction in which the field is developing, both in theory and practice. The information is subdivided into the following sections, namely, strategic purchasing perspectives, strategic purchasing policies, strategic purchasing process and strategic buyers. However, the sections are closely inter-related and as far as possible overlapping of information could not be avoided.

5.2 STRATEGIC PURCHASING PERSPECTIVES

In considering new manufacturing directions, Miller and Ciampa (1993:98) contend that "*American manufacturing managers have made tremendous strides over the last ten years. They have led the way in their corporations in Total Quality, increased the productivity of American manufacturing firms at a faster rate than their counterparts in Japan and Germany, and cut time out of processes. But these accomplishments offer little solace to those looking at what they must now achieve.*" Strategic planning, customer orientation, early supplier involvement, partnership, cross-functional relationships, just-in-time systems and many more strategic issues dominate the recent literature on purchasing. These ideas draw buyers towards a view of their work that is far different from the traditional heavy paperwork, reactive buying actions and price-oriented competition for which the buying community is known. These concepts are derived from technology and information systems that enable buyers to visualise and measure the effect of their decisions in a manner not feasible even one decade ago. Adopting the same trend of thought, Sysons (1992) contends that the cumulative effect of these approaches to purchasing is overall improvement in product quality, reduced cost of operations and increased competitiveness throughout the economy. Several authors, among whom one could include Carter and Narasimhan (1995), Hendrick and Ellram (1995), Monczka and Trent (1993) and Scheuing (1997), have explored the future of purchasing. A detailed discussion of some of their findings will be made and subsequently the various strategic issues within this context will be discussed.

Firstly, the authors, especially Scheuing (1997:345-350) strongly maintain that the

purchasing function will be **sourcing**, not purchasing. Purchasing still connotes issuing purchase orders, doing the paperwork to execute decisions made by others. As purchasing is rapidly getting out of the business of clerical transaction, Scheuing (1997:347) asserts that the term sourcing correctly suggests expertise in identifying, monitoring, and improving the performance of responsible and responsive sources. The logical extension of this idea is that purchasing will become a management function of external operations. Management of external operations will imply greater reliance on information technology, compatibility of planning and information systems, greater need for strategic sourcing and supply management. To achieve this Carter and Narasimhan (1995:62) suggest that "*... purchasing and supply management professionals will require greater general management (interdisciplinary) training than they have had in the past*".

Adopting the same trend of thought, Hendrick (1995:93) asserts that purchasing will be driven by **customer requirements** and not requisitions. Purchasing professionals ought to be passionate about knowing their customers and meeting their requirements. Internal and external customers judge the value received from purchasing and will defect if their expectations are not satisfied. In this regard purchasing would be expected to emphasize **value creation and delivery**, not procedures. Russil (1997:150) philosophically presents value as the relationship between a product's performance and its cost. Customers value a quality product delivered on time at a competitive price. Carter and Narasimhan (1995:14) emphasise that the "*Strategic view of purchasing and supply management demands that it be linked to the market and the customer, leading to the extension of the 'reach' of purchasing and supply management all the way from suppliers through the internal value chain of the firm, to the market, and on through to the customer.*"

In addition the authors, Carter and Narasimhan (1995), Hendrick (1995) and Scheuing (1997), contend that purchasing will be energized by a **vision**, not just governed by a mission. Purchasing's mission is a statement about its nature and purpose within an enterprise, describing its role, competencies, and approach to doing business. While it correctly defines what purchasing currently is and does, a purchasing vision is a

statement about the function's future nature and role. Scheuing (1997:347) maintains that "... *a vision is an inspiring concept of a team of world class professionals, strategically partnering with suppliers and customers to enhance the competitiveness and performance of all players*".

An additional twenty first century perspective concerning the purchasing department will be the treatment of suppliers as external resources, not vendors. Indeed suppliers are sources of ideas, technologies, and savings in time and money. Vendors merely execute orders and meet specifications. Poor supplier performance costs an enormous amount of money. Russil (1997:21) indicates that "... *sophisticated manufacturing techniques have demanded that suppliers' performance rate highly on efficiency, reliability and cost effectiveness and buyers are increasingly aware that excellence in these areas has to be achieved in a collaborative manner rather than crudely demanded.*" The management of external resources, therefore becomes the priority and this is indeed a monumental shift from the traditional emphasis on optimising individual transactions. Russil (1997:21) concludes that "... *managing and motivating these external resources is critical for business success and it becomes more appropriate to define the buyer's role as managing a large part of our company which we do not own, cannot see and which is staffed by people who we do not employ.*"

Adopting the same trend of thought as Russil (1997:150), Scheuing 1997:348) asserts that purchasing will focus on **bottom line contributions**, not price and maintains that "... *in the traditional emphasis of purchasing's critics, price is merely one element in a product's total cost to an enterprise and a higher price may well be justified by a product's bottom line impact in the form of energy conservation*". It will enhance the enterprise's **competitive advantage**, not its bureaucracy. Indeed purchasing professionals can make valuable contributions to an enterprise's competitiveness and ultimately to the enterprise's return on investment by searching for better processes, materials, and technologies, and by tapping into suppliers' talents and capabilities.

5.3 STRATEGIC PURCHASING TRENDS

As the strategic importance of purchasing is increasingly recognized, purchasing should be increasing its role in product design. Leading-edge enterprises will have purchasing people on design teams, and purchasing should have personnel who are technically proficient and who can communicate their proficiency effectively. Within this context, purchasing policies will vary from enterprise to enterprise. It is not intended to examine each and every policy. Charman, Tsuai and Whittington (1997:128) suggest that there are however, several general trends. In trying to discern the strategic issues in purchasing for the purposes of the empirical study, the general trends presented by respected authors, Russil (1997), Scheuing (1997), Carter and Narasimhan (1995) and Ellram and Hendrick (1993) will be considered.

Firstly, the authors point out that as barriers to international trade are decreasing, purchasing will manifest an **international character** and will not be confined just to local purchasing. There are dominant reasons that lead purchasing professionals to search the global marketplace for competent and competitive sources. Locke (1997:85) points out that traditionally enterprises purchase internationally for one fundamental reason and that is to be able to use the best suppliers in the world, thereby gaining competitive advantage in product design and manufacture. However Locke (1997:85) suggests that a more strategic reason encompasses the matching of a sales-driven strategy that mandates purchases in a given country. These could be formal countertrade and offset requirements, or a less tangible belief that sales will increase if an enterprise's presence in a country increases. In this regard Locke (1997:85) affirms that "*... a procurement office network can make the search for the world's best suppliers more efficient, it can speed up the domestic purchasing department's learning curve, and it can reduce the cost of the supply chain and supplier management*".

The **second** trend as outlined by Ellram and Hendrick (1993) centres on building **strategic alliances**, not have adversarial relationships. Purchasing products from multiple vendors in an adversarial mode, one transaction at a time, has been the

traditional pattern of several purchasing departments. Scheuing (1994:3-9) postulates that this unenlightened approach is a far cry from modern purchasing's efforts to partner with key suppliers for mutual benefit. Consistent with this policy is the utilisation of long-term contracts, not purchase orders. Scheuing (1997:348) points out that purchase orders are inefficient means of dealing with suppliers. Certainly, short-term contracts signify very limited commitment while multi-year contracts help establish relationships and set annual cost reduction targets. Purchasing will practice joint cost management, not what several authors call pressure tactics. The traditional approach of "squeezing" suppliers for lower prices ignores their legitimate need to earn fair and reasonable profits in relation to risk and capital employed. Joint cost management involves shared responsibility for understanding and reducing cost in the supply chain for mutual benefit.

The **third** trend pertains to quality and is contained in Inman's and Hubler's study (1992:11) - "*Certify the process and not the product*". Purchasing will pursue continuous improvement, not incoming inspection. The rationale behind this is that one cannot inspect quality into a product; the damage is already done by the time inspection occurs. Problem prevention and continuous improvement enhance production, reliability, use characteristics, and sales. There are several streams of research that have examined the influence of the elements of quality, cost and time on profitability. In considering these elements, Carter and Narsimhan (1995:63) allude that "... *although competition in the future will be based on time, innovation, customization, and technological capabilities, cost and quality leadership will continue to influence the ability of a firm to compete successfully*". Consequently, quality assurance is an important criterion for supplier selection. Buyers have to consider what assurance can suppliers give with regard to design and technical specifications. Furthermore, according to what quality standards are the suppliers proposing to produce the required products. Enterprises that emphasise quality improvement would require suppliers to initiate statistical process control or other quality assurance techniques that focus on the elimination of production process variability. This may include conformance with certain international standards. A supplier's ability to identify and resolve problems along with a philosophy that defects

are not acceptable at any stage of design and manufacturing process are also the cornerstones of buyer-supplier quality improvement efforts.

The emergence of a global marketplace has impacted significantly on every enterprise. Competitive pressures have forced many enterprises to realise that in order to succeed in the new global market, product quality must be superior. Meeting and exceeding the minimum requirements laid out by the International Standards Organisation (ISO) has become a virtual prerequisite to both international and domestic enterprises.

The **fourth** trend concerns the early involvement of the purchasing function or what O'Neal (1993:3-7) refers to as concurrent engineering and not emergency requisitions. Scheuing (1997:348) indicates that in a typical purchasing department, at least 40% of the requisitions received require immediate action and expedited shipping. Therefore he concludes that purchasing professionals of the future will participate in new product processes from the outset and involve selected suppliers as well. The traditional method of taking ideas from the research laboratory into product design, through production and on to the customer is extremely time consuming because purchasing usually comes in when everything has been set. In addition the individual functions, such as production, marketing, purchasing and research and design, work independently with the product, or idea after the preceding unit has completed its phase of the process. The outcome of this process typifies excessive waste and possibly loss of customers to competitors. O'Neal (1993:8) proposes that "*... concurrent engineering holds tremendous promise for organizations that can rise above the sequential, compartmentalized approach to manufacturing*". O'Neal (1993:8) concludes "*... the significant features of concurrent engineering are its customer focus and its cycle time reduction process resulting in customer satisfaction and long term loyalty of valued customers.*"

The final trend involves Dobler's (1995:111-114) suggestion that purchasing will invest in continuing education, not use trial-and-error purchasing. No profession can sustain and advance itself without ongoing efforts to update and upgrade skills and

knowledge. Scheuing (1997:348) contends that "*...purchasing without appropriate education is dangerous because it can run afoul of the law and fail to protect an organization's legitimate interests properly.*"

5.4 STRATEGIC PURCHASING PRACTICES

The first practice that Carter and Narasimhan (1995), Hendrick and Ellram (1995), Monczka and Trent (1993) and Scheuing (1997) discuss is outsourcing essential services. As enterprises identify and focus on their core competencies, they often find it beneficial to transfer responsibility for non-core services to external. Ellram and Maltz (1997:295) cite that "*... outsourcing has become one of the most widely talked about and implemented tools for organizational change in the 1990s*". Many factors have been cited for this phenomenon - globalization, the desire to reduce the workforce, desire to decrease the fixed asset base, downsizing, and the growing availability of outsource service providers. What is really happening, and how does this affect purchasing? Ellram and Maltz (1997) further indicate that most top managers cite strategic reasons for increasing outsourcing. Enterprises are choosing to develop internal competencies which the competition cannot match. Enhancing capabilities such as advanced product design or flexible manufacturing require financial and managerial resources. Successful outsourcing is designed to free up resources to be applied to the enterprises. Brandes and Lilliecreutz (1995:272) suggest that "*... enterprises also outsource to reduce costs, the outside enterprise may enjoy lower wage rates and as a specialist and the outsource supplier may be more efficient and can apply lessons learned from its other customers.*" The outside enterprise is focused only on a specific task and as such this usually leads to better production processes and more efficient execution. The trend toward increased outsourcing reinforces the role of purchasing and supply management in strategic cost management. As a greater share of a product's cost will be incurred "outside" the firm, thus necessitating careful consideration of cost of acquisitions. It becomes evident that purchasing and supply management will play an increasingly important strategic cost management role in the future.

The **second** practice cited by the authors, Carter and Narasimhan (1995), Hendrick and Ellram (1995), Monczka and Trent (1993) and Scheuing (1997) is that purchasing will employ state-of-the-art information technology. Computers will be essential tools for purchasing professionals. These will be further used to communicate information, access databases, identify, link up with, and pay suppliers, and also to "surf the internet". In considering the "**megatrends for the purchasing profession**", Long (1997:265) clearly illustrates that electronic commerce is extensively being utilised and will be the mode of choice in the next century. In comparing traditional enterprises and the modern enterprise with specific reference to electronic commerce, Long (1997:267) states that "*Traditional enterprises adorn their desks with traditional "IN" and "OUT" baskets, bosses made sure that the paper kept moving, auditors investigated the paper to make sure that it was completed correctly, signatures and authorizations were all on paper. Paper was evidence that something was happening. Today, one speaks of moving toward a paperless society. This does not imply that paper will no longer be used, but rather that traditional functions performed by paper will probably be performed by some kind of an electronic means*".

Hence, Carter and Narasimhan (1995), Hendrick and Ellram (1995), Monczka and Trent (1993) and Scheuing (1997) contend that most purchases in the future will be "cashless" and electronic data interchange will come into its full potential. Many forces have come to bear to propel these changes, such as, falling prices of computers, team decision making, the reduction of staff functions, and the never ending drive for greater productivity. In addition to the expansion of traditional MRP and record keeping tasks, buyers of the future will use the computer for real-time information on suppliers, critical commodities, and news events. The same computer will be used for video conferencing as well as receiving sales presentations. The expanded use of electronic data interchange will result in the rapid movement of information, orders, and money. Purchasing managers who fail to adjust to these trends will likely find that they have either minimized or eliminated their own role in the enterprise of the future.

The **third** practice identified by Carter and Narasimhan (1995), Hendrick and Ellram (1995), Monczka and Trent (1993) and Scheuing (1997) concerns professionalism applied to all purchases. Scheuing (1997:349) argues that "... *aggressive promotion of professional approaches to purchasing throughout an enterprise will capture even non-traditional buying.*" This trend of thought is also shared by Hendrick (1995:93) who strongly maintains that "*commodities traditionally not managed by purchasing (health care, financial services, consulting, training, transportation) will be managed by sourcing teams*". Consistent with this Carter and Narasimhan (1995:60) proposes that the strategic reach of purchasing and supply management will increase in the future. Finally, Graw (1997:380) also contends that "*Organizations have traditionally assigned the service contracting responsibility to functional organizations other than purchasing. This traditional approach has not always been effective with the business, negotiation and analytical skills resident in the organization's purchasing and contracting staff.*"

The **fourth** strategic practice that Carter and Narasimhan (1995), Hendrick and Ellram (1995), Monczka and Trent (1993) and Scheuing (1997) consider is that purchasing will strive for dramatic cycle time reduction or engage in time-based strategies. Generally, time-based strategies embody the value-added dimensions of time. Reducing the time consumed by a process reduces cost and increases the enterprise's competitiveness. In reviewing some of the literature, ample evidence of the existence of economic, strategic and operational reasons for reducing the product development cycle is provided. Major forces initiating the need for time compression of product development have been created by increasingly aggressive global and domestic competition, improved mass communications, and increasing consumer sophistication. Scheuing (1997:349) contends that the development of time-based strategies may provide firms with the ability to deal effectively with time-compressed product development, thereby providing a firm with the major challenges of the next century.

The next contention is the utilisation of a performance measure (benchmarks) to assess and improve performance relative to other enterprises in the same industry.

This will encompass measurement, comparison and improvement and will certainly encourage identification and application of best practices as identified in comparisons with other enterprises. Schoen (1997:27) suggests that the use of best practice information to improve competitiveness and overall purchasing is increasing among enterprises worldwide and enterprises are achieving significant strategic and financial impact of purchasing performance. In this regard purchasing has to:

determine which strategies/best practices are currently being employed;
compare the business unit strategies to other business units and enterprises;
develop and prioritize action plans as appropriate; and
review progress and compare progress over time as strategies/best practices are implemented

Finally, Carter and Narasimhan (1995), Hendrick and Ellram (1995), Monczka and Trent (1993) and Scheuing (1997) suggest that purchasing will use customer satisfaction measurement to build customer loyalty. Customers are considered an enterprise's lifeblood. Without customers, purchasing will vanish. By carefully measuring internal customer satisfaction levels, purchasing can learn how and where to improve performance, and create loyal customers who will refer others. Consistent with this, Carter and Narasimhan (1995), Hendrick and Ellram (1995), Monczka and Trent (1993) and Scheuing (1997) maintain that purchasing will offer satisfaction guarantees to ensure customer feedback and satisfaction. By providing satisfaction guarantees to their internal customers, purchasing professionals can attend to sources of dissatisfaction and help customers achieve desired results.

5.5 STRATEGIC PURCHASING MANAGEMENT

In the age where requisitioners will be able to access most of the world's sources on the internet and place electronic purchase orders, the logical question must be raised regarding the exact nature of a buyer's contribution to the enterprise. The preceding discussions imply a much broader scope of contribution to the enterprise.

Scheuing (1997:349) is adamant that in the twenty first century, the purchasing

function will demand leaders not managers. Using the definition that managers do things right and leaders do the right things, Scheuing (1997:349) affirms that purchasing requires leaders who coach their teams, not managers who act as bosses. This indeed necessitates broadly skilled professionals, not poorly trained clerks. Kolchin and Giunipero (1993:3) identified the skills and abilities required of buyers in the year 2000 which include "*A broad array of analytical, communication, decision making, business leadership skills and persons endowed with highly technical knowledge*" and conclude that "*...across the world, a major effort to upgrade purchasing groups is under way in many enterprises.*"

Russil (1997:20-21) points out that some enterprises are streamlining their rules to allow for greater flexibility in a rapidly changing environment. The dual effects of downsizing and better education lead to the need and demands for greater decision making authority by buyers, their customers, and suppliers. In this regard Scheuing (1997:349) contends that empowered buyers can make decisions on the spot and take ownership of situations. Furthermore, he argues that purchasing professionals ought to be as creative as their colleagues in other functions. They ought to be more and more broadly educated, and they ought to use their creativity to bring innovative solutions to their customers.

An interesting contention of the authors cited above suggest a pay for performance salary, not just a fixed salary. Since buyers impact an enterprise's return on investment every bit as much as its marketers and while salespeople have long received incentive pay, buyers who save money have historically been told that saving money was their job and that they should not expect extra compensation for delivering savings. Scheuing (1997:349) suggests that slowly, but surely, some enterprises have begun to reward buyers for their performance and strongly maintains that this trend needs to grow.

Finally, Scheuing (1997:350) concludes that "*Purchasing will be an exciting career opportunity and a major contributor to an enterprise's performance. It will be led by broadly skilled professionals who view themselves as empowered risk managers*

and relationship leaders, utilising the latest business tools to enhance the competitive advantage of their organizations".

5.6 CROSS-FUNCTIONAL PURCHASING TEAMS - A STRATEGIC PRACTICE

Monczka and Trent (1993) maintain that the functional separation introduced long ago by Alfred P Sloan at General Motors has outlived its usefulness and, in fact, have become counterproductive. Monczka and Trent (1993:7), having identified the increasing importance of cross-functional purchasing teams, reveal that "**80 percent of US enterprises surveyed plan to emphasize the use of cross-functional teams to support procurement and sourcing decisions over the next three years**". The use of cross-functional sourcing teams entails the involvement of all internal stakeholders in the process of selecting, monitoring, and developing suppliers.

In this regard Long (1997:266) suggests that "*The traditional bureaucratic model, complete with organization charts, job descriptions, and pyramid hierarchy, was characterized by assigning unique and specialized tasks to all functions in the firm and traditional bureaucrats are still fighting a losing battle to keep their beloved functions separate*". The merger of the purchasing, materials, inventory, production planning, logistics, warehousing, systems, quality, and other supply related functions will continue. The authors contend that it is even possible that these functions, once unified, could be represented by one professional organisation.

From the above discussion, it can be deduced that purchasing professionals are associated with the management of change. They have to manage change within their own enterprises, with suppliers and they have to coordinate the change. This section presents insights into managing change, dealing with resistance to change; the role of organisational culture in change management and applying these insights to the change management challenges faced by purchasing professionals.

Several authors among whom one can include Hugo, Van Rooyen and Badenhorst (1997), Baker (1992) and Nasser and Vivier (1993) have considered the mindset of

the new generation organisation. Nasser and Vivier (1993:3-7), in particular, point out that over the last twenty years the need to effectively manage change has increased dramatically due to rapid changes in technology, the need to respond to rapidly changing markets, an increasingly changing global competitive environment and constantly changing work forces and supplier bases.

5.7 CONCLUSION

This chapter, **targeting purchasing for profitability: focusing on strategic issues**, considered the future role of purchasing. It concentrated on those major changes in the purchasing paradigm that will unfold in the years ahead. Four areas were identified for scrutiny. These included strategic purchasing perspectives, strategic purchasing trends, strategic purchasing practices and strategic purchasing management. **Strategic purchasing perspectives** encompassed a critical examination of the current contribution of purchasing to the return on investment and the demands of the future. **Strategic purchasing trends** considered the future policies that the purchasing department will adopt in order that it would make a significant contribution to profitability. **Strategic purchasing practices** embodied the processes that purchasing management will utilise to achieve a competitive advantage. Finally, the changing roles of **purchasing management** in achieving competitive advantage were considered. This chapter generated further strategic issues that should be considered for the empirical study. Rather than to describe the problems of industrial purchasing management, this chapter further stressed what is new and defined the direction in which the field is developing, both in theory and practice. Much of the ideas generated in this chapter were embodied in the construction of the questionnaire used for the next part of the study.

CHAPTER SIX

THE EMPIRICAL INVESTIGATION: PROCEDURE AND METHOD OF STUDY

6.1 INTRODUCTION

This chapter, the final one in this part, concerns the various procedures adopted in obtaining empirical data for the study. **Firstly**, details pertaining to the focus group discussions and field interviews conducted in a cross section of enterprises in KwaZulu Natal are presented. **Secondly**, the procedure and method concerning the pilot survey are detailed and **finally**, the methodological procedure of the main survey is described. The outcome of the focus group discussion, field and telephone interviews are also presented.

6.2 FOCUS GROUP DISCUSSION AND FIELD INTERVIEWS

At the outset, it needs to be emphasized that the first characteristic of focus group discussion and field interviews is that it is not intended to be an accurate statistical sample. It is aimed at reflecting typical views held by a target group. The personnel of the various enterprises that participated in the discussions and field interviews were people whose views and attitudes, the researcher considered important. This indeed provided a preliminary indication of the opinions held. Though not capable of standing up to rigorous statistical analysis, the group discussions and field interviews were considered to be useful for the pilot study.

6.2.1 Planning the focus group discussions and field interviews

The initial phase of the research study was the formation of a committee of five senior executives in the purchasing and materials management field and four academic staff members of tertiary institutions in KwaZulu Natal. This assisted the researcher to further develop the model of strategic purchasing and its role in the performance of the enterprise. A total of twelve enterprises, two small, three

medium and seven large enterprises were identified which the committee considered as exemplifying the concepts of quality, performance and "good" purchasing practice. Field interviews and site visits were undertaken over a period of ten days. All enterprises were situated within one hundred kilometre radius of Durban and all enterprises are located in KwaZulu Natal.

The committee further suggested that focus group discussions and field interviews should not only serve the purpose of the study but should also provide more insight into topical issues that impact on the role of the purchasing department. In order to provide insight beyond the questionnaire research, ten site visits and two telephone interviews were conducted by the researcher. These interviews were performed on a convenience sample of twelve enterprises identified by the committee and those enterprises that were prepared to host a short visit. Two small, three medium and seven large enterprises were eventually considered. Information was obtained from a total of thirty nine purchasing personnel and nine members of the committee. Discussants vigorously dealt with the issues germane to those outlined by the committee and the study objectives. Their ideas, which were incorporated into the design of the questionnaire used in the main survey, are discussed in the next subsection.

6.2.2 Outcome of focus group discussions and field interviews

The committee initially considered the possibility of the focus group discussions being recorded on tape as this would free the researcher from the onerous task of recording the discussion manually and would devote complete attention to each discussion. The idea proved to present some difficulties. The presence of microphones and recording equipment was considered to be an inhibiting factor and discussant may be reluctant to be candid. The committee recommended that the idea be abandoned. The discussion was recorded manually after each focus group discussion although the gist was recorded during the discussion. The subsequent subsections present the major outcome of the focus discussion. Although the focus group discussion and field interviews will construct a statistical portrait of the

average purchasing department, there was a wide degree of variability among the responding enterprises and participants. With regard to staffing, for example, the number of people employed ranged from a low of one to ninety six. Purchasing served many roles in the twelve enterprises and was generally placed in the highest regard. In all enterprises, purchasing was considered the key contributor to the enterprise's profitability. The following subsections present some of the findings.

6.2.2.1 Identifying the tasks of South African purchasing personnel

The tasks identified were dependent on the size of the purchasing department, the type of purchasing organisation and to whom the purchasing function reports. The three types of purchasing organisations identified were completely centralised, completely decentralised and centralised/decentralised. Table 6.1 reflects the different types and numbers of purchasing departments, the total staff members in each type of purchasing department and to whom the department reports. The figures given in brackets () reflect the average number of purchasing personnel in each type of buying organisation. The figures given in brackets [] reflect the total number of purchasing personnel in each the three types of buying organisations. Eight of the purchasing departments report to the financial department, three to production and one to top management.

TABLE 6.1
OVERVIEW OF SAMPLE USED IN THE PILOT STUDY

TYPE OF PURCHASING DEPARTMENT	NUMBER	TOTAL DEPARTMENTAL STAFF (RANGE)	REPORTING TO FINANCIAL DEPARTMENT	REPORTING TO PRODUCTION DEPARTMENT	REPORTING TO TOP MANAGEMENT
Centralised	6 [130]	8 to 67 (21)	4	1	1
Decentralised	2 [76]	1 to 75 (38)	2	-	-
Centralised/ Decentralised	4 [140]	12 to 96 (35)	2	2	-
TOTAL	12 [346]	Average 29	8	3	1

The descriptive data suggests that purchasing is a centralised activity and that the number of buyers tend to increase with the size of the enterprise. This is

further reflected in Table 6.2. The figures given in brackets () refer to the number of purchasing personnel.

TABLE 6.2
OVERVIEW OF SAMPLE USED IN THE PILOT STUDY IN TERMS OF
SIZE OF ENTERPRISE

SIZE OF INDUSTRY				
TYPE OF PURCHASING DEPARTMENT	SMALL	MEDIUM	LARGE	TOTAL
Centralised	2 (8)	2 (24)	2 (98)	6 (130)
Decentralised	-	-	2 (76)	2 (76)
Centralised/ Decentralised	-	1 (12)	3 (128)	4 (140)
TOTAL	2 (8)	3 (36)	7 (302)	12 (346)

The second task was associated with **Reviewing purchase requisitions to determine their appropriateness with regards to requests from user department**. All purchasing departments performed this task. However, the extent of the responsibility varied. All were involved in reviewing of purchase requisitions, determining conformance with established policies and procedures and reviewing for proper authorization. The conditions that lead the user department's decision to purchase a particular product were known by all purchasing departments. In very few cases, the purchasing department indicated that they reviewed requisitions against user department's budget.

When questioned about being involved in the establishment of **policies and procedures**, only two indicated that they were involved. In certain instances (5), purchasing manuals were not updated from as far back as 1985. All were involved in identification of sources of supply but not in the selection. All were involved in the requests for quotations. Four indicated that they are involved in the selection of suppliers but the functional and divisional head had the final authority. Generally, purchasing personnel were involved in the

. tactical aspects of purchasing.

Discussions with buyers revealed that top management's perception of the importance of the purchasing function ranged from highly important to little important. From observation, it was noted that there was little or no difference between top management's perception of the importance of purchasing and the perception and attitudes of the buyers towards the importance of their tasks. The dominant focus is the product, price and suppliers. Only two of the enterprises' buying departments were involved in the purchase or lease of high value manufacturing equipment, land and buildings and motor vehicles. However, the purchase or lease of office equipment, furniture and other non-capital items such as repairs and cleaning staff were done by many of the buying departments. In all instances purchasing did not even participate in the purchase of items of a capital nature.

The next task entailed the **involvement of purchasing in 'make or buy decisions**. Make or buy analysis was conducted by only two purchasing departments. This seems to be the prerogative of top management in 10 of the enterprises. In two enterprises, make or buy analysis is conducted by the buying department. It was interesting to note that extensive work was done by 4 enterprises. The unpredictable **labour situation in supply markets** was cited in all cases as a contributory factor in make or buy decision being entrusted to the buying department. In addition the unpredictable labour situation in the enterprise was reported as having an adverse effect on the effectiveness of the purchasing function. One buying department reported that the assembly line workers refused to use packing material from a certain supplier. The threat of a strike required the buying department to locate another supplier whom the workers saw in a better light. Due to the contractual obligations of the buying enterprise, purchasing staff were concerned that the demands of labour negated the professional conduct of the purchasing departments. Worker demands forced purchasing personnel, at

times, to take decisions that were not consistent with strict economic principles.

Purchasing has played a leading role in the **search for, identification of, and selection of suppliers**. Purchasing investigates and searches out information on suppliers.

In general, the focus group discussions revealed that at most enterprises have not changed significantly their purchasing process over the last 10 years. **The function is still regarded as primarily a clerical activity in 10 of the 12 enterprises visited.** There has been little purchasing involvement in non traditional buying and is largely ignored. In all enterprises, the main emphasis was the purchase of goods and services and little or no input into buying decisions on capital equipment, transportation, resale items, construction, land and buildings. In none of the visits did the researcher observe measurement/evaluation systems in position for purchasing effectiveness. Buyers reported that top management considers the function as very important, but many feel that it is moderately effective. Furthermore, purchasing is not considered a major contributor to key areas of strategy development, economic forecasting, long term planning, product innovation, technological development and market planning. Finally, top management perceives that purchasing contributes by assuring supply, containing prices and maintaining ethical standards. They are not expected to take risk and innovate.

6.2.2.2 The role of organised labour in purchasing and materials management

All enterprises pointed out that the unpredictable labour situation impacted heavily on the efficient functioning of the purchasing department. The high incidence of strikes at enterprises' plants and those of suppliers negated the work of purchasing departments. It was noted that in some instances trade unions demanded that certain suppliers should not be contracted. Striking

workers at times intimidated supplier's delivery staff when raw materials entered the premises of the buying enterprise. Although this was not within the scope of this study, it requires further investigation.

6.2.2.3 The changing political and economic environment and the future trends and direction of purchasing

It was noted that political and trade policies have implication on the competitiveness. The outward-looking trade policies are leading to economic growth and prosperity which give enterprise the added advantage of competing globally. However, international purchasing was limited to six enterprises. Three enterprises have indicated that long term contracts have been negotiated for raw materials. Four indicated that capital goods are sourced outside the country. This was the result of cost-reduction pressures with the need to gain exposure to exposure worldwide process and product technology. The discussions suggest that there will be an increased reliance on international suppliers for product and process technology.

All enterprises were confident of the future prospects of purchasing as a strategic management function. The liberalised trading environment, the movement from an isolationist stance under a highly protected tariff regime and an outward orientation under moderate protection have been cited as policies encouraging competitiveness and the strategic importance of purchasing within this context is increasingly being recognised. One striking feature of all participants was their eloquent general economic knowledge. In addition, they had vast knowledge of their products, raw materials and supply markets. It also became evident that whilst the importance of purchasing was being identified, purchasing does not get enough credit. There are significant contributions that purchasing makes to cost reduction that are not being recognised. Top management fail to realise that material price variance which is visible is not the only approach to cost reduction.

6.3 THE MAIN SURVEY

The subsequent and most important phase of the study involved the detailed construction of a comprehensive questionnaire which was designed to provide a great deal of information about the research study - *Strategic issues associated with purchasing in manufacturing enterprises*. The main survey was conducted during the following period, December 1996 - April 1997.

6.3.1 Sample used in the main survey

Baker (1992:289-292) contends that sampling is obtaining information from a portion of a larger population or universe and it aims at getting information which can be regarded as representative of the whole. This representation implies possession of the essential characteristics of the whole.

Furthermore Baker (1992:291) suggests that the ideal sample is a random probability sample. However, this requires a very adequate population list or framework from which to sample. Whilst such a list is available in the form of business telephone and facsimile directories and registers compiled by institutions like the Chamber of Commerce and Yellow Pages, it needs to be pointed out that an ideal sample may not be generated due to the nature, magnitude and diversity of the industrial enterprises. The resultant sample might well be so widely spread geographically that it would make interviewing difficult and expensive.

In conducting this study, quota sampling method was be used. In general statisticians have criticised the method for its theoretical weakness, however, market researchers have defended it for its inexpensiveness and administrative convenience. Chisnall (1986:78) contends that *"quota sampling is much more flexible than random sampling, and its advantages make it attractive under certain conditions to commercial researchers"*. Intercontinental Marketing Services of Africa who conducted the fieldwork, classification of answers and computer processing for the studies of the Buthelezi Commission into the

requirements for stability and development in KwaZulu Natal asserts that an ideal sample is a random probability sample, the results of a quota sample approximate very closely to random sampling. In order to improve the quality of the sample, strict quota controls were implemented in accordance with the committee's recommendation.

Stratification factors which were important to the subject of the survey were identified and implemented. For the purpose of this study, one hundred and fifty respondents for the study was considered adequate.

The whole of KwaZulu Natal was divided into 5 geographical sampling regions: Southern Natal region (Port Shepstone being major centre), Durban and its peri-urban fringes; Natal Midlands (Pietermaritzburg being the major centre); Natal North Coast (Richards Bay and Isithebe being major centres) and Northern Natal (Newcastle being the major centre)

6.3.2 Organisation of field work and the pilot survey

A detailed list of membership of the Institute of Purchasing of South Africa (Kwa-Zulu Natal Chapter) was obtained. The use of members of the Institute as respondents for the study rests on the following: Firstly, the majority of members, with the exception of a few academics are purchasing personnel working in manufacturing enterprises in Kwa-Zulu Natal. Discussions with buyers suggest that chief purchasing executives are not only encouraging but compelling members on their staff to subscribe to the principles of the Institute. Secondly, knowledge in purchasing that is disseminated at the regional meetings and seminars of the Institute aims at professionalism in purchasing and through the professional conduct and disposition of buyers, management may have recognised the strategic importance of the buying department.

The committee, having accepted the rationale for the use of a quota sample generated a list of 150 sampling enterprises in the 5 geographical sampling regions. This is presented in Table 6.3. The sample spanned several classification of

industry groups.

Fifteen part-time post graduate students at the University of Zululand were recruited for the task of interviewing respondents, visiting purchasing personnel and ensuring that the questionnaires were completed. Three interviewers were located in each of the 5 geographical sampling regions. This procedure was adopted for obvious reasons. Firstly, it provides an easy access to the sample generated as all interviewers are employed by several major enterprises within the geographical sampling regions. Secondly, it is easier to administer a training programme on research methodology for post graduate students than under graduate students as research methodology forms an important component of the study curriculum of post graduate students. The survey was conducted during the period December 1996 - April 1997.

TABLE 6.3

GEOGRAPHICAL SAMPLING POINTS AND INDUSTRIAL CLASSIFICATION

	SOUTHERN NATAL	DURBAN (FRINGES)	NATAL NORTH COAST	NATAL MIDLANDS	NORTHERN NATAL	TOTAL
MINING	-	-	2	2	4	8
BEVERAGES	2	2	2	2	2	10
FOOD AND CANNING	9	4	8	12	10	43
PAPER	1	1	2	-	-	4
AUTOMOBILE	-	1	1	-	-	2
CHEMICAL	2	1	2	1	1	7
BUILDING SUPPLIES	2	1	2	2	2	9
CLOTHING SHOE AND TEXTILE	1	4	1	5	3	14
PETROLEUM PRODUCTS	-	2	-	-	-	2
AUTOMOTIVE SUPPLIES	-	5	-	-	-	5
FURNITURE	1	1	2	2	2	8
GLASS	1	1	-	-	-	2
TYRE	-	2	-	-	-	2
ELECTRICAL	2	1	1	2	2	8
ENGINEERING	9	4	7	2	4	26
TOTAL	30	30	30	30	30	150

Prior to the main survey a **three-stage training programme** was conducted with the interviewers. **In the first stage**, interviewers were briefed on the importance of the survey and instructed on the method of interviewing and recording of information. Details concerning the recording of information on a five point Likert scale were also dealt with. This was an extremely important part of the first training phase. Each interviewer was given two sets of questionnaire to be studied and completed in respect of his enterprise and in respect of a neighbouring enterprise. (Annexure B contains the instructions to the fieldworkers). **The second stage of training** comprised of a detailed checking and discussion of completed questionnaires with individual interviewers. Problems associated with the questionnaire were considered and errors rectified. The final questionnaire (Annexure I) was unanimously accepted. **In the third and final stage** three respondents were interviewed by each interviewer and the completed questionnaires were thoroughly checked with the interviewers concerned. At the completion of the interviewing, a telephonic spot check of more than 10 percent (5 telephonic spot checks) of the interviewees was conducted to detect possible irregularities and discrepancies in the method of interviewing.

6.4 FRAMEWORK OF ANALYSIS FOR THE MAIN SURVEY

For the purpose of the study, the following were explored:

- the correlation between the degree of importance of current purchasing activities and the degree of emphasis over the following five years;
- the degree of sensitivity to satisfactory product performance and whether purchase decisions are joint decisions involving more than one person in the final decision to initially select a particular product, quality or supplier;
- the partnership affinity between buying and supplying enterprises in small, medium and large enterprises;
- the importance of price as the most important buying criterion in a partnership relationship;
- the nature of the product in terms of new task, modified rebuy and straight rebuy and its bearing on sources of information;

- the use of sole sourcing by large enterprise as compared to small and medium enterprises;
- the correlation between sole sourcing and partnership relationship; and finally
- purchasing personnels' involvement in strategic corporate activities.

To achieve the objectives of the study, the researcher pursued a rigorous research strategy involving multivariate statistical research methods of analysis. As the statistical tests were computer generated, the application of the test-techniques are not discussed in the text, however summary discussions are included. Prior to embarking on a statistical analysis of the survey data an exploratory data analysis framework was developed.

The primary objective of the exploratory data analysis was to examine and simplify the data. **Factor analysis**, a method of analysis frequently used in the social sciences, was carried out to accomplish these objectives. Since the investigation commenced with a tentative conceptual framework (refer committee), concepts relating to purchasing activities in an enterprise were developed for which no direct measures exist. No numeric value can be applied to the empowerment of purchasing personnel. Nonetheless, such key issues were of major interest in this study. Consequently the design of the questionnaire included several subjective measurements for each concept for which data were collected. In this phase of analysis, one of the objectives was to verify whether subjective measurements were consistent with a single underlying concept or whether a more complex structure had to be developed. Most subjective variables were measured using a five-point Likert scale.

Another objective of the exploratory data analysis was that of data reduction. Subjective measurement scales were grouped into clusters which seem to have a high correlation with an underlying factor. The idea is that if a smaller number of basic factors can be identified, they can be used as independent variables in a practically explanatory model in place of a larger number of items originally included in the questionnaire. The empirical data obtained were analysed by using the computer.

6.5 CONCLUSION

This chapter outlines the various procedures adopted in obtaining empirical data for the study. **Firstly**, details pertaining to the focus group discussions and field interviews conducted in a cross section of enterprises in Kwa-Zulu Natal were presented. **Secondly**, the procedure and method concerning the pilot survey were given and **finally**, the methodological procedure of the main survey was also outlined. The outcome of the focus group discussion, field and telephone interviews were also summarised.

CHAPTER SEVEN

CONVERGENCE OF THEORY AND PRACTICE: FINDINGS OF THE EMPIRICAL STUDY

7.1 INTRODUCTION

The previous chapter presented the methodological procedure in obtaining the empirical data for the study. This chapter, *inter alia*, embodies the major findings of the empirical study. These include, **firstly** the essential characteristics of the sample in terms of the size of industrial enterprises, different product markets, personnel interviewed and the different organisational types of purchasing departments. **Secondly**, the findings relating to the current degree of importance and degree of emphasis over the following five years are presented. Several major trends have been identified within this context and reported on. **Thirdly**, this chapter presents the empirical findings of the extent of partnership relationship among the various enterprises and the reasons for such a relationship. **Fourthly**, the strategic roles and responsibilities in terms of current and future involvement of purchasing are presented. **Fifthly**, the findings in respect of information sources in terms of the buying situations are given. Findings pertaining to sole sourcing and the correlation between sole sourcing and partnership relationship are thereafter presented. **Finally**, the hypothesis of the study are subjected to the test.

7.2 ESSENTIAL CHARACTERISTICS OF THE SAMPLE

Details of the sample selection were discussed in the previous chapter. Essentially the sample constituted small, medium, and large manufacturing enterprises producing capital, consumer and industrial goods. Three types of purchasing organisations that were identified in the literature survey were included in the empirical study. These included centralised purchasing organisation, decentralised purchasing organisation and a combination of both. The interviewees were all employed in the purchasing departments of these manufacturing enterprises. The dispersion of the sample in

terms of size of industrial enterprise, type of purchasing organisation, different product markets and interviewees are presented in the following subsections.

7.2.1 Dispersion of sample in terms of the size of industrial enterprise and the product market

Table 7.1 presents the dispersion of the sample in terms of the size and the nature of industrial product that the enterprise produces, namely capital goods, consumer goods and industrial goods.

TABLE 7.1
DISPERSION OF SAMPLE IN TERMS OF THE SIZE OF INDUSTRIAL
ENTERPRISE AND THE PRODUCT MARKET

(n = 150 respondents)

		PRODUCT MARKET			ROW TOTALS
		CAPITAL GOODS	CONSUMER GOODS	INDUSTRIAL GOODS	
S	SMALL	19 25,7%	44 59,5%	11 14,9	74 49,3%
I	MEDIUM	8 16,3%	33 67,3%	8 16,3%	49 32,7%
Z	LARGE	8 29,6%	13 48,1%	6 22,2%	27 18,0%
E	COLUMN TOTALS	35 23,3%	90 60,0%	25 16,7%	150 100%

Small enterprises constituted 49,3 percent of the sample, medium-sized enterprises consisted of 32,7 percent of the sample and large enterprises consisted of 18 percent of the sample. The dispersion of the sample in terms of the size of the manufacturing enterprise typifies the proportion of small, medium and large enterprises in KwaZulu Natal. Manufacturing enterprises producing capital goods constituted 23,3 percent of the sample. Enterprises producing consumer goods

constituted 60 percent of the sample and enterprises producing industrial products constitute 16,7 percent of the sample.

7.2.2 Dispersion of sample in terms of the size of industrial enterprise and the personnel interviewed

Table 7.2 shows the proportion of junior staff, senior staff and employee in the purchasing department that provided the empirical data. These three categories of staff were identified during the pilot survey and were based on the level of reporting. The most senior staff who usually had the designation manager of purchasing or procurement or senior purchasing officer reported to top management. Some senior staff were heads of sections within purchasing and materials management department. Junior staff were identified as purchasing personnel who reported to a senior staff within the purchasing department. An employee within the department was one that did not actually perform the task of purchasing but other strategic activities such as costing and estimation, value analysis and value engineering, recycling, government regulations and disposal of scrap and waste.

In all cases the interviewees who fell in the category "employee in the department" previously held purchasing positions in the purchasing department. There was a prerequisite for the completion of the questionnaire and was discussed with the interviewers who in turn discussed this with the most senior staff. This prerequisite was necessary to avoid any distortion of results or findings.

Although all questionnaires were handed to the **most senior person** in the purchasing department and discussions were held with them, interviewers noted the actual person who provided the data. This is reflected in Table 7.2 and the dispersion across the three industry type is also given.

TABLE 7.2
DISPERSION OF SAMPLE IN TERMS OF THE SIZE OF INDUSTRIAL
ENTERPRISE AND THE PERSONNEL INTERVIEWED

(n = 150 respondents)

		PERSONNEL INTERVIEWED			
		JUNIOR STAFF	MOST SENIOR STAFF	EMPLOYEE IN THE DEPT	ROW TOTALS
S	SMALL	38 25,3%	3 2,0%	33 22,0	74 49,3
I	MEDIUM	6 4,0%	32 21,3%	11 7,3%	49 32,7
Z	LARGE	2 1,3%	4 2,7%	21 14,0%	27 18,0
E	COLUMN TOTALS	46 30,7%	39 26,0%	65 43,3%	150 100%

Junior staff members of purchasing departments constituted 30,7 percent of the sample, senior staff members constituted 26 percent of the sample and employees in the purchasing department constituted 43,3 percent. Although every effort was made to gather data from the main target of the survey, namely, the most senior purchasing personnel, the dispersion of the sample in terms of personnel interview does give an indication that purchasing personnel may not have been available to complete the questionnaire and also did not have time to spare for an in-depth interview. Nevertheless the information received from junior staff members and other employees from the various purchasing departments are well considered information. The time taken to complete the questionnaires ranged from one hour and forty minutes to three hours in some cases.

7.2.3 Dispersion of sample in terms of the size of industrial enterprise and organisational type

Table 7.3 presents the dispersion of sample over the three organisational types,

namely, centralised, decentralised and a combination of both.

TABLE 7.3

DISPERSION OF SAMPLE IN TERMS OF THE SIZE OF INDUSTRIAL ENTERPRISE AND ORGANISATIONAL TYPE

		ORGANISATIONAL TYPE			ROW TOTALS
		CENTRALISED	DECENTRALISED	COMBINATION OF BOTH	
S	SMALL	23 31,1%	16 21,6%	35 47,3%	74 49,3%
		I	MEDIUM	13 26,5%	11 22,4%
Z	LARGE	7 25,9%	8 29,6%	12 44,4%	27 18,0%
E	COLUMN TOTALS	43 28,7%	35 23,3%	72 48,0%	150 100%

Centralised buying departments constitute 28,7 percent of the sample, decentralised constitute 23,3 percent of the sample and a combination of both organisational types constitute 48 percent of the sample. The high prevalence of the latter organisational type indicates that South African industrial enterprises seem to be adopting the trends of many North American and European industrial enterprises. Purchasing enterprises that adopt a combination of centralised and decentralised type of purchasing organisation have straight re-buy purchases conducted at plant or divisional level whereas modified re-buy and new task purchases are conducted at headquarters.

7.2.4 Dispersion of sample in terms of product market and organisational type

Table 7.4 shows the different organisational types that are favoured by each product market. The three different organisational types are almost equally dispersed in manufacturing enterprises that produce consumer goods. The combination of both

decentralised and centralised seem to be favoured by enterprises that produce capital goods (71,4 percent) as well as enterprises that produce industrial goods (56,0 percent).

TABLE 7.4
DISPERSION OF SAMPLE IN TERMS OF PRODUCT MARKET AND
ORGANISATIONAL TYPE

Product Market	ORGANISATIONAL TYPE			ROW TOTAL
	CENTRALISED	DECENTRALISED	COMBINATION OF BOTH	
CAPITAL GOODS	7 20,0%	3 8,6%	25 71,4%	35 23,3%
CONSUMER GOODS	29 32,2%	28 31,1%	33 36,7%	90 60,0%
INDUSTRIAL GOODS	7 28,0	4 16,0%	14 56,0%	25 16,7%
COLUMN TOTALS	43 28,0%	35 23,3%	72 48,0%	150 100%

7.3 THE DEGREE OF IMPORTANCE AND EMPHASIS OF STRATEGIC PURCHASING ACTIVITIES

Table 7.5 merely shows the empirical data obtained in respect of the **twenty one** strategic purchasing activities that were identified (refer Annexure A). Statistical data, namely, the mean, the lower quartile and the standard deviation pertaining to the current degree of importance and the degree of emphasis over the next five years are given.

A detailed analysis of the statistical findings as presented in Table 7.5 allows one to rank the strategic purchasing activities. The ranking is presented in Table 7.6.

TABLE 7.5
THE DEGREE OF IMPORTANCE AND EMPHASIS OF STRATEGIC
PURCHASING ACTIVITIES

(n = 150 respondents)

VARIABLES	STRATEGIC PURCHASING ACTIVITIES	IMPORTANCE	EMPHASIS OVER NEXT 5 YEARS
4 and 25 1	The use of cross functional purchasing teams	Mean 2,96 Lower quartile 1 Standard Deviation 1,58	Mean 3,84 Lower quartile 3 Standard Deviation 1,43
5 and 26 2	Co-location of supplier and buying firms	Mean 3,24 Lower quartile 2 Standard Deviation 2,34	Mean 4,15 Lower quartile 4 Standard Deviation 1,19
6 and 27 3	Supply-base reduction	Mean 3,02 Lower quartile 1 Standard Deviation 1,67	Mean 3,70 Lower quartile 2 Standard Deviation 1,62
7 and 28 4	Increasing technical qualification of purchasing staff	Mean 4,04 Lower quartile 3 Standard Deviation 1,35	Mean 4,28 Lower quartile 4 Standard Deviation 1,17
8 and 29 5	Total quality management	Mean 4,1 Lower quartile 3 Standard Deviation 1,28	Mean 4,41 Lower quartile 4 Standard Deviation 1,11
9 and 30 6	Strategic sourcing management	Mean 3,78 Lower quartile 3 Standard Deviation 1,43	Mean 4,03 Lower quartile 3 Standard Deviation 1,31
10 and 31 7	Strategic supplier alliances	Mean 3,74 Lower quartile 3 Standard Deviation 1,40	Mean 3,78 Lower quartile 3 Standard Deviation 1,49
11 and 32 8	Reducing number of purchasing staff	Mean 2,79 Lower quartile 1 Standard Deviation 1,69	Mean 3,20 Lower quartile 1 Standard Deviation 1,82
12 and 33 9	Just-in-Time deliveries	Mean 3,87 Lower quartile 3 Standard Deviation 1,45	Mean 4,02 Lower quartile 3 Standard Deviation 1,47
13 and 34 10	Environmentally sensitive purchasing	Mean 3,95 Lower quartile 3 Standard Deviation 1,37	Mean 4,38 Lower quartile 4 Standard Deviation 1,19
14 and 35 11	Reducing purchasing cycle time	Mean 3,15 Lower quartile 1 Standard Deviation 1,65	Mean 3,62 Lower quartile 3 Standard Deviation 1,54

15 and 36 12	Strategic cost management	Mean 3,56 Lower quartile 3 Standard Deviation 1,53	Mean 4,05 Lower quartile 3 Standard Deviation 1,34
16 and 37 13	Co-operative network of suppliers	Mean 3,88 Lower quartile 3 Standard Deviation 1,36	Mean 4,21 Lower quartile 5 Standard Deviation 1,61
17 and 38 14	Shift from cost reduction to avoidance	Mean 3,28 Lower quartile 2 Standard Deviation 1,53	Mean 3,99 Lower quartile 3 Standard Deviation 1,27
18 and 39 15	Time-based purchasing strategies	Mean 3,57 Lower quartile 3 Standard Deviation 1,44	Mean 3,72 Lower quartile 2 Standard Deviation 1,49
19 and 40 16	Increased decision to buy rather than make (outsourcing)	Mean 3,72 Lower quartile 3 Standard Deviation 1,38	Mean 4,04 Lower quartile 3 Standard Deviation 1,34
20 and 41 17	Reducing purchasing transaction costs	Mean 3,48 Lower quartile 3 Standard Deviation 1,50	Mean 3,84 Lower quartile 3 Standard Deviation 1,40
21 and 42 18	Electronic data interchange	Mean 3,90 Lower quartile 3 Standard Deviation 1,39	Mean 4,32 Lower quartile 4 Standard Deviation 1,42
22 and 43 19	Purchasing performance measurement systems	Mean 3,56 Lower quartile 3 Standard Deviation 1,48	Mean 3,94 Lower quartile 3 Standard Deviation 1,98
23 and 44 20	Using supplier technical and design support	Mean 3,86 Lower quartile 3 Standard Deviation 1,47	Mean 4,18 Lower quartile 3 Standard Deviation 1,28
24 and 45 21	International purchasing	Mean 3,61 Lower quartile 2 Standard Deviation 1,63	Mean 3,60 Lower quartile 2 Standard Deviation 1,61

7.4 RANK ORDER OF THE DEGREE OF IMPORTANCE AND EMPHASIS OF STRATEGIC PURCHASING ACTIVITIES

Using the statistical information of the **twenty one** strategic activities of the purchasing department as presented in Table 7.5, a rank order of the degree of importance and degree of emphasis of the strategic activities was generated. Table 7.6 presents the rank order of the degree of importance and the degree of emphasis. In addition the degree of change is reflected in brackets (). The top five and the bottom five ranked variables in respect of the current degree of importance and

degree of emphasis over the following five years are considered for further investigation.

TABLE 7.6
RANK ORDER OF THE DEGREE OF IMPORTANCE AND EMPHASIS OF
STRATEGIC PURCHASING ACTIVITIES

(n = 150 respondents)

VARIABLES	STRATEGIC PURCHASING ACTIVITIES	DEGREE OF IMPORTANCE	EMPHASIS OVER NEXT 5 YEARS
4 and 25 1	The use of cross functional purchasing teams	20	15 (+5)
5 and 26 2	Co-location of supplier and buying firms	17	7 (+10)
6 and 27 3	Supply-base reduction	19	18 (+1)
7 and 28 4	Increasing technical qualification of purchasing staff	2	4 (-2)
8 and 29 5	Total quality management	1	1 (0)
9 and 30 6	Strategic sourcing management	8	10 (-2)
10 and 31 7	Strategic supplier alliances	9	16 (-7)
11 and 32 8	Reducing number of purchasing staff	21	21 (0)
12 and 33 9	Just-in-Time deliveries	6	11 (-5)
13 and 34 10	Environmentally sensitive purchasing	3	2 (+1)
14 and 35 11	Reducing purchasing cycle time	18	20 (-2)
15 and 36 12	Strategic cost management	13	8 (+5)
16 and 37 13	Co-operative network of suppliers	5	5 (0)
17 and 38 14	Shift from cost reduction to avoidance	16	12 (+4)

18 and 39 15	Time-based purchasing strategies	12	17 (-5)
19 and 40 16	Increased decision to buy rather than make (outsourcing)	10	9 (+1)
20 and 41 17	Reducing purchasing transaction costs	15	14 (+1)
21 and 42 18	Electronic data interchange	4	3 (+1)
22 and 43 19	Purchasing performance measurement systems	14	13 (+1)
23 and 44 20	Using supplier technical and design support	7	6 (+1)
24 and 45 21	International purchasing	11	19 (-8)

7.4.1 Strategic activities that were highly ranked

From Table 7.6 the following were highly ranked strategic activities in terms of current degree of importance and degree of emphasis over the next five years: total quality management; increasing technical qualification of purchasing staff; environmentally sensitive purchasing; electronic data interchange; and co-operative network of suppliers. These strategic activities merit further discussion.

7.4.1.1 Total quality management

Total quality management, the fifth of twenty one strategic variables, is ranked number one in terms of degree of importance and also number one in respect degree of emphasis in the following five years. This clearly illustrates that South African manufacturing enterprises have embodied in their strategic plan the total quality commitment. Quality is one of the watchwords of purchasing. In addition, one can surmise that enterprises are not only concerned about more efficient operations, better utilisation of time, materials and resources but also on improving relationships with customers and suppliers and formalising systems that are consistent with punctual delivery, reduction of wastage, losses and damages and

rectification of errors at an early stage.

With the widening focus of purchasing and increase in its influence, the strategic importance of total quality management becomes significant. Furthermore, the widening focus of purchasing and its commitment to total quality management suggest that buyers are concerned about the product outcome manifested in product reliability, product consistency and product cost.

7.4.1.2 Increasing technical qualification of purchasing staff

Variable four, namely **increasing technical qualification of purchasing staff**, was ranked number two in terms of degree of importance and ranked fourth in terms of degree of emphasis in the following five years. One of the prerogatives of purchasing is that purchasing staff has the right to negotiate internally and question the specification of the user department. In internal negotiation, as with most other forms of negotiation, questioning is a core activity. Judicious questioning helps improve knowledge of important issues such as technical specifications and requirements. It offers the opportunity to clarify understanding of points a buyer wants to make and comprehension of those made internally or externally. This further requires confidence on the part of purchasing staff. Purchasing as a profession has carried a significant inferiority complex. Evidence such as low pay, minimal qualification, lack of advancement opportunities, low reporting level and exclusion from business strategy formulation reinforces this complex.

The degree of importance of increasing technical qualification of purchasing staff may probably characterise purchasing's aspiration in becoming meaningfully involved in strategic purchasing activities and also the role of education in achieving total quality management which ranks as number one. However, it becomes of lesser importance (number four) in the following five years. Links between functions such as engineering, quality, production, marketing, information systems and finance will be improved through artful questioning and credibility which can be achieved by being fluent in the technical idiom of the industry. Lack of the right

term and use of the wrong term often brands buyers as a stranger to the discipline.

7.4.1.3 Environmentally sensitive purchasing

Variable ten, **environmentally sensitive purchasing**, is ranked number three in terms of degree of importance and number two in the following five years. An important new area of strategic concern, the environmentally sensitive purchasing would seem to require a significant level of future involvement of purchasing staff. This illustrates that the purchasing function is increasing its role in the strategic decision making process and demonstrating the significant contributions that purchasing can make to an enterprise's strategic success. Different approaches to contract, evaluation of sources of supply, selection processes, methods of handling disputes, issues of liability present a new dimension of purchasing.

In further considering this variable with variable four, increasing technical qualification of purchasing staff there seems to be a strong correlation. Environmentally sensitive purchasing requires technical expertise. Negotiations in environmentally sensitive purchasing require technical knowledge of many aspects and the risks involved. Together with this one needs to consider the various legislations governing waste material in KwaZulu Natal. Incidence of legal claims against industrial enterprises by employees over the use of hazardous material feature frequently in the media and this could probably be one reason why environmentally sensitive purchasing features prominently.

7.4.1.4 Electronic data interchange

Variable eighteen, namely use of **electronic data interchange**, is ranked number four in terms of current degree of importance and number three in terms of emphasis over the next five years. This reflects the growing acceptance of technology in many industrial enterprises and it is gaining widespread approval. The work that purchasing engages in falls into the category of handling information. The manual handling of pieces of paper is eliminated through the use of electronic

data interchange. Communication of purchasing orders, acknowledgements, shipping notices and invoices could move directly between buyers and suppliers through direct links using computers.

The finding clearly illustrates that the electronic handling of information has expanded considerably and will continue in the future. Enterprises are actively developing strategic plans to integrate some form of electronic data interchange into their supply chain management practices. This allows the purchasing enterprise to develop and at the same time maintain a competitive advantage. Electronic data interchange continues to be a primary area of purchasing systems growth. The reason for this would include the reduction of material ordering cycle times and the closer buyer-seller relationships and improved communication. The development of complex purchasing strategies requires closer buyer-seller interaction and information sharing.

7.4.1.5 Co-operative network of suppliers

Variable number thirteen, namely, the **co-operative network of suppliers** as a strategic purchasing activity is highly ranked. Both in terms of degree of importance and degree of emphasis over the following five years, this variable is ranked number five. Reliance on suppliers as a source of product and process technology will continue to increase. The high ranking also suggests that suppliers will become increasingly important in achieving the strategic goals of the buying enterprise. This could occur when an enterprise focuses on core competencies and outsources non core requirements.

The findings furthermore demonstrate that competitive strategies of confrontation are being replaced by more co-operative dealings between buying enterprises and their suppliers. These co-operative relationships are intended by buyers to improve the efficiency and effectiveness of their operations. The business enterprises surveyed are capitalising on the good ideas of their suppliers. This presents opportunities for further cost reductions. The areas of co-operation could further

include quality and logistics. The synergy created through co-operation leads to a win-win situation for all involved. Suppliers also experience cost reductions and improved profitability. From the empirical data it is evident that in highly competitive environment, the buying and supplying enterprises are working together for mutual competitive advantage. The implication of this finding is that the purchasing department needs to maintain a network of capable suppliers.

7.4.2 Strategic activities that were lowly ranked

From Table 7.6 the following were strategic activities that were lowly considered in terms of current degree of importance and degree of emphasis over the next five years: reducing number of purchasing staff; the use of cross functional purchasing teams; supply base reduction; reducing purchasing cycle time; and co-location of supplier and buying enterprises. International purchasing and time-based purchasing strategies as strategic purchasing activities are singled out for further investigation. International purchasing as a strategic purchasing activity is ranked number eleven in terms of current degree of importance and ranked number nineteen in terms of degree of emphasis over the following five years. Time-based purchasing strategies was ranked number twelve in terms of current degree of importance and number seventeen as degree of emphasis over the next five years.

7.4.2.1 Reducing number of purchasing staff

Reducing number of purchasing staff is not seen by buyers as strategic decision. In both cases, namely, degree of importance and degree of emphasis in the following five years, this variable is ranked twenty one. Despite the increase in the use of electronic data, one could have imagined that the purchase staff reduction would be considered. One probable reason for this, is that purchasing management have realised the growing depth of the field of purchasing and as such reduction of purchasing staff will not be a strategic decision. The evolution of purchasing from a predominantly transaction focus to that of ultimately delivering key strategic benefit to the enterprise requires adequate purchasing staff. With a service image

of purchasing, the focus is operational. There is insufficient time for quantitative and qualitative analysis, however, with the strategic evolution of purchasing, the function ought to be proactively managed as the scope of purchasing is expanded across the enterprise.

7.4.2.2 The use of cross functional purchasing teams

Variable one, **the use of cross functional purchasing teams** is currently ranked number twenty as the degree of importance but fifteen as the degree of emphasis in the following five years. Enterprises are considered the use of cross functional purchasing teams as a strategic purchasing tool. In essence, the industrial enterprises surveyed plan to emphasize the use of cross-functional teams to support purchasing decisions over the following five years. However, the findings indicate that enterprises are not in readiness to pursue the cross-functional purchasing team concept. This must be seen from another perspective. Purchasing has fought for long and in some cases hard to be part of the enterprise and they may not be ready to be team players and purchasing personnel may not perceive themselves as members of a cross functional team involved in product development.

The findings may suggest that purchasing is trying to get its priorities straight and then look at becoming enthusiastic and productive players of the team. The increase in ranking from twenty to fifteen suggest that enterprises are turning to cross functional teams which can become the lifeblood of any manufacturing enterprise competing in a fierce business environment. For this to occur cross functional teams should be able to assess supplier's process capability, overall quality commitment and the integrity of a supplier's quality control techniques before a final supplier selection decision is made.

7.4.2.3 Supply-base reduction

Supply-base reduction, ranked number nineteen as the degree of importance has gained one point in respect of the degree of emphasis over the next five years.

While Western countries have realised the strategic importance of supply-base reduction, enterprises surveyed in this study do not. Supply-base reduction requires the elimination of suppliers not capable of achieving certain performance levels. Affirmative buying practices suggest the use of a large number of suppliers. There could be deep political undertones for this and the variables that follow namely, reducing purchasing cycle time, co-location of supplier and buying enterprise, international purchasing and time-based purchasing strategies. The sharing of purchasing needs among previously disadvantaged enterprises could be a possible reason for this trend. There are probably activities, such as early supplier design involvement, direct supplier development and supplier performance improvement rewards, in place that can increase supplier performance contribution and improvement. This is reflected by the high ranking of variable number thirteen, namely, co-operative network of suppliers.

7.4.2.4 Reducing purchasing cycle time

Reducing purchasing cycle time is ranked number eighteen and twenty in terms of degree of importance and degree of emphasis in the next five years respectively. The findings reflect that this variable is not of strategic importance. However, the reason for this must be seen in the light of the following: variable two, co-location of supplier and buying enterprises and variable three, supply-base reduction. It would make sense. If co-location of supply and buying enterprises is becoming of strategic importance as reflected in the findings and supply base reduction is not of strategic importance then reducing purchasing cycle time will certainly not be a strategic purchasing activity. This study clearly indicates that quality and cost will continue to be major competitive capabilities for competing successfully. Time-related capabilities will not be utilised in the near future.

7.4.2.5 Co-location of supplier and buying enterprises

This variable has already been alluded to. **Co-location of supplier and buying enterprise** as a strategic purchasing activity is ranked seventeen in terms of current

degree of importance and seven in terms of degree of emphasis in the next five years. Although supply base reduction is not regarded as a strategic activity, it does not imply that supply base increase will be a strategic activity. Although this may be the tendency. If this assumption is true, then it accounts for co-location of supplier and buying enterprise being a high strategically ranked activity in the following five years.

7.4.2.6 International purchasing

Variable number twenty one, **international purchasing** as a strategic purchasing activity is ranked number eleven in terms of current degree of importance and a low of nineteen in terms of degree of emphasis over the following five years. This is indeed surprising. One would have expected that this variable to be highly rated strategic purchasing activity especially with South Africa launching itself into a liberalised trading environment focusing on the achievement of international competitiveness. South African manufacturing enterprises have recognised that the world has become one marketplace. In the process, the country has moved from an isolationist stance under a highly protective tariff regime towards an outward orientation under moderate protection. This ought to be a challenge for buyers in South Africa. There are several factors that may account for this situation. This could range from poor foreign exchange rates on one hand to international supplier apathy on the other.

7.4.2.6 Time-based purchasing strategies

Finally, **Time-based purchasing strategies** as a strategic purchasing activity was ranked number twelve in terms of degree of importance and number seventeen as degree of emphasis. Time-based purchasing strategies focuses on time and productivity. Again, the low ranking of time-based purchasing strategies may be explained in terms of the new focus of purchasing from a political viewpoint and that quality and cost will be the competitive weapon.

Using Spearman Rank Correlation, a correlation co-efficient of 0,77 ($p < 0,01$) of the rank order of the degree of importance and the degree of emphasis was thereafter obtained. This suggests that there is a strong correlation between the current activities performed by the purchasing departments and the activities that they intend to use in the future to gain competitive advantage.

7.5 ENTERPRISES ENGAGING IN PARTNERSHIP RELATIONSHIP

Table 7.7 presents a dispersion of sample in terms of the size of industrial enterprise and enterprises engaging in partnership relationship which is an area of strategic concern. The Table reflects that the sample is almost equally distributed in terms of those engaging in partnership relationship (50,7 percent) and those that do not (49,3 percent). The engagement of small industrial enterprises in a partnership relationship was the highest as reflected by the 52,7 percent of the total small enterprise sample compared to 46,9 percent and 51,9 percent for medium and large industrial enterprises respectively.

The preponderance of small and large industrial enterprises engaging in partnership relationship may be explained by the mere definition of partnership relationship as a commitment over an extended period of time and the mutually sharing of information, risks and rewards of the relationship. Small industrial enterprises by their very nature cannot afford the cost of "going it alone" and probably seek partnerships with large enterprises. At the same time large enterprises are adopting affirmative buying practices in supporting small and medium enterprises. Partnerships represent a long term strategic approach to relationship management. With a long term commitment, small and large industrial enterprises gain assurance of consistent availability and quality maintenance which has been ranked number one in terms of purchasing's strategic activities. The findings of this study suggest that supplier partnership relationship seems to be a deliberate purchasing strategy. Managing these relational exchanges can also be considered as a strategic purchasing activity which entails a systematic maintenance and proactive enhancement of mutually beneficial long term business exchange relationships with a limited number of carefully selected partner

enterprises. Within this context, supplier development activities would feature as an important purchasing activity. The partnership relationship is in itself a means of communication. This would ideally encompass buyers and sellers meeting, exchanging opinions, perceptions, feelings and judgements face to face.

TABLE 7.7

DISPERSION OF SAMPLE IN TERMS OF THE SIZE OF INDUSTRIAL ENTERPRISE AND ENTERPRISES ENGAGING IN PARTNERSHIP RELATIONSHIP

		ENGAGING IN PARTNERSHIP RELATIONSHIP		
		YES	NO	ROW TOTALS
S	SMALL	39 52,7%	35 47,3%	74 49,3
	I	23 46,9%	26 53,1%	49 32,7
Z	LARGE	14 51,9%	13 48,1%	27 18,0
E	COLUMN TOTALS	76 50,7%	74 49,3%	150 100%

7.6 REASONS FOR ENGAGING IN PARTNERSHIP RELATIONSHIP

Seven variables that could be considered reasons for partnership relationship were identified. The rank order of each variable is presented in Table 7.8. The findings of both those who engage in partnership relationship and those who do not are reflected in the table. Those who engage in partnership relationship presented the reasons as applicable to their relationships, while those who did not engage in partnership relationship presented the reasons as possible grounds for a partnership relationship. The reasons include price of delivered item/product class (ranked number 1), desire to influence/gain access to supplier's technology (ranked number three), desire to influence supplier's quality (ranked number four), desire to improve delivery schedules (ranked number five), reduce internal purchasing procedures and

costs associated with ordering (ranked number six), secure reliable sources of supply (ranked number two) and support Just-in-Time initiatives (ranked number 7). The three most important reasons for engaging in partnership relationship are singled out for further discussion.

TABLE 7.8
RANKING OF REASONS FOR ENGAGING IN PARTNERSHIP RELATIONSHIP

VARIABLE	REASON FOR ENGAGING IN PARTNERSHIP RELATIONSHIP	RANKING
64	Price of delivered item/product class	1
65	Desire to influence/gain access to supplier's technology	3
66	Desire to influence supplier's quality	4
67	Desire to improve delivery schedules	5
68	Reduce internal purchasing procedures and costs associated with ordering	6
69	Secure reliable sources of supply	2
70	Support Just-in-Time initiatives	7

Contrary to the findings of the literature survey (see chapter three), the empirical survey found that the **price of the delivered item/product** ranked number one. Valued partnership relationship seems to be dependent upon price which could translated into the creation of value. Buyers are expected to achieve continuous price/cost reductions and the findings of this study suggest that this can be achieved through this collaborative relationships.

To secure reliable sources of supply has been ranked number two. The securing of reliable sources of supply as a reason for partnership relationship suggests the importance of reliable sources and that there may be problems associated with sources of supply. As there are differences between transaction-based product and relationship based products, securing reliable sources of supply should ideally feature prominently. Greater openness and increased communications between buyers and suppliers characterise a partnership relationship. As there is a government policy

promoting small and medium enterprises, large enterprises seem to have embraced government policy by engaging in partnership relationship. This would entail development of small enterprises and therefore it may be surprising that securing of reliable suppliers is emphasized.

A desire to influence/gain access to supplier's technology is ranked number three. Cost reduction strategies involve looking beyond the enterprise. Meaningful partnership relationship will entail the outsourcing of certain production processes. Limited funds, particularly in small businesses, will present the desire to influence/gain access to supplier's technology as an important reason for a partnership relationship. Even large manufacturing enterprises would desire to influence/gain access to supplier's technology for the purpose of safeguarding the threat of competition, achieving competitive advantage and at the same time focusing on quality at the supply point.

Further analysis of the highly ranked reason, namely price of delivered item/product class, is presented in Table 7.9.

TABLE 7.9
THE IMPORTANCE OF PRICE OF DELIVERED PRODUCT TO DIFFERENT
INDUSTRY TYPES ENGAGING IN PARTNERSHIP RELATIONSHIP AND
THOSE THAT DO NOT

		ENGAGING IN PARTNERSHIP RELATIONSHIP		
		YES	NO	ROW TOTALS
S	SMALL	19 45,2%	23 54,8%	42 49,4% (74) (56,8%)
	I	14 43,8%	18 56,3%	32 37,6% (49) (65,3%)
Z	LARGE	4 36,4%	7 63,6%	11 12,9% (27) (40,7%)
E	COLUMN TOTALS	37 43,5%	48 56,5%	85 100% (150) (56,7%)

The table reflects the importance of price of delivered product to different industry types engaging in partnership and those that do not engage in a partnership relationship. The importance of price seems to be more important among small and medium enterprises as reflected by the 56,8 percent of the small enterprise sample of 74 and 65,3 percent of the medium enterprise sample of 49. Of the large enterprise sample of 27, only 40,7 percent ranked price as the most important reason for engaging in a partnership relationship. The figures given in brackets () represent the total of the sample of each industry type. The importance of price of delivered product to the different industrial types engaging in partnership relationship and those that do not is further presented in Table 7.9. It further shows that price is not as important to large industrial enterprises when compared to small and medium industrial enterprises. Of a total of 85 enterprises that ranked price of delivered product as the number **one** reason for a partnership relationship only 4,7 percent which constitute the large enterprises ranked price as number **one** reason.

Upon further examining what could be the main reason for large industrial enterprises engaging in a partnership relationship, **a desire to influence/gain access to supplier's technology**, which was ranked number **three** overall was highly ranked (number 1) by large enterprises. This is reflected in Table 7.10 by the 80,0 percent.

TABLE 7.10

THE IMPORTANCE OF A DESIRE TO INFLUENCE/GAIN ACCESS TO SUPPLIER'S TECHNOLOGY TO DIFFERENT INDUSTRY TYPES ENGAGING IN PARTNERSHIP RELATIONSHIP AND THOSE THAT DO NOT

		ENGAGING IN PARTNERSHIP RELATIONSHIP		
		YES	NO	ROW TOTALS
S I Z E	SMALL	58,8%	41,2%	42,5%
	MEDIUM	46,2%	53,8	32,5%
	LARGE	80,0%	20,0%	25,0%
	COLUMN TOTALS	60,0%	40,0%	100%

The importance of securing reliable sources of supply ranked number two in respect of large enterprises. This is reflected in Table 7.11 by the 60 percent.

TABLE 7.11
THE IMPORTANCE OF SECURING RELIABLE SOURCES OF SUPPLY TO
DIFFERENT INDUSTRY TYPES ENGAGING IN PARTNERSHIP
RELATIONSHIP AND THOSE THAT DO NOT

		ENGAGING IN PARTNERSHIP RELATIONSHIP		
		YES	NO	ROW TOTALS
S	SMALL	47,4%	52,6%	57,6%
I	MEDIUM	44,7%	56,3%	27,3%
Z	LARGE	60,0%	40,0%	15,2
E	COLUMN TOTALS	48,5%	51,5%	100%

7.7 ROLE, RESPONSIBILITY AND THE CURRENT INVOLVEMENT OF PURCHASING IN MAJOR CORPORATE ACTIVITIES

Sixteen strategic roles and responsibilities have been identified. The extent of purchasing's involvement in these strategic activities was ascertained by means of a five point Likert scale where one being no involvement, three being moderate involvement and five being extensive involvement. For this purpose, the respondent's were required to respond to the following: In your enterprise, which term would best describe the purchasing department's current role/responsibility/ involvement in major corporate activities? The findings are presented in **Table 7.12**. A rank order of the involvement of purchasing in the sixteen strategic roles and responsibilities was generated. This was based upon the mean values, standard deviation and lower quartile values as reflected in Table 7.12. It should be noted that the involvement of purchasing in these strategic roles are exceedingly low.

It is not intended to discuss all sixteen strategic roles of the purchasing department

and its involvement in the corporate activities. Instead, the focus of the discussion that follows are on the significant ones ranked highly in the empirical study, namely, marketing planning, technology planning, new product development, value analysis and value engineering as well as capital project/investment planning. These were generally the high key areas where purchasing is currently involved. The low key areas include: International countertrade - offset planning (ranked number 16), service acquisition such as travel; accommodation; car rental and advertising (ranked number 15), financial cash flow planning (ranked number 14), economic forecasting (ranked number 13) and finally corporate mergers/acquisitions/alliances (ranked number 12).

TABLE 7.12
RANKING OF ROLES, RESPONSIBILITIES IN TERMS OF THE CURRENT INVOLVEMENT OF PURCHASING

Variable	Role - Responsibility - Involvement	Ranking	Statistical Data
47 and 92 1	Corporate strategic planning (Long term)	11	Mean 2,32 Standard Deviation 1,50 Lower quartile 1
48 and 93 2	Corporate Mergers/Acquisitions/Alliances	12	Mean 2,21 Standard Deviation 1,33 Lower quartile 1
49 and 94 3	Technology planning	2	Mean 2,99 Standard Deviation 1,62 Lower quartile 1
50 and 95 4	Capital project investment planning	5	Mean 2,95 Standard Deviation 1,63 Lower quartile 1
51 and 96 5	Value analysis and value engineering	4	Mean 2,96 Standard Deviation 1,53 Lower quartile 1
52 and 97 6	Marketing planning	1	Mean 3,06 Standard Deviation 1,50 Lower quartile 2

53 and 98 7	New product development	3	Mean 2,98 Standard Deviation 1,58 Lower quartile 1
54 and 99 8	Information systems planning	9	Mean 2,57 Standard Deviation 1,48 Lower quartile 1
55 and 100 9	Environmental planning	7	Mean 2,76 Standard Deviation 1,59 Lower quartile 1
56 and 101 10	Financial Cash flow planning	14	Mean 2,19 Standard Deviation 1,45 Lower quartile 1
57 and 102 11	Government relations	10	Mean 2,54 Standard Deviation 1,55 Lower quartile 1
58 and 103 12	Outsourcing (Make or Buy)	6	Mean 2,89 Standard Deviation 1,70 Lower quartile 1
59 and 104 13	International-countertrade - offset planning	16	Mean 1,43 Standard Deviation 1,43 Lower quartile 1
60 and 105 14	Operations/production/ producibility	8	Mean 2,60 Standard Deviation 1,84 Lower quartile 1
61 and 106 15	Service acquisition (travel; accommodation; car rental; advertising)	15	Mean 1,86 Standard Deviation 1,46 Lower quartile 1
62 and 107 16	Economic forecasting	13	Mean 2,2 Standard Deviation 1,44 Lower quartile 1

7.7.1 Marketing Planning

Dramatically changing market conditions require significant changes in the purchasing roles and responsibilities. The marketing department is responsible for the generation of income for the enterprise. One of the functions of the marketing department is keeping purchasing and production informed of sales quotas and

expectations as a guide to probable quantity requirements of materials. As this is an essential task of purchasing, **marketing planning** (variable six) is therefore ranked number one in terms of purchasing's current involvement. Special contracts between marketing and its customers need the involvement of purchasing. Purchasing will be required to prepare estimates of the cost of materials, planning the product lines within a stated price range and cost limitation. The purchasing department is therefore of great assistance in determining how much quality or quantity can be built into a product or an item within such limitations. Purchasing also suggest means of cost reduction or quality improvement to enhance the marketing of a product. In this way it contributes to the competitive position of the enterprise. The purchasing department indeed has a wealth of information on sales policies, approaches of suppliers and other manufacturers that are highly effective. This accumulation of material is particularly valuable because it has been objectively received and appraised by the purchasing staff and it makes available a practical basis for determining what policies, what sales approach and what type of material are most effective. The close co-operation between marketing and purchasing probably manifests itself in the form of marketing notifying purchasing immediately of its requirements and to assist purchasing in negotiating with suppliers. Within this context purchasing becomes involved in marketing planning. The implication of marketing planning being ranked number one, although being reflected as moderate involvement, as a strategic purchasing role or responsibility is that purchasing is moving into the area of strategy formulation.

7.7.2 Technology planning

Purchasing strategy ought to encompass an awareness of the changing technology which may affect the enterprise's raw materials, production processes, products and services. Changing technology opens up vast opportunities. Variable number **three**, namely **technology planning** as a major corporate activity is ranked number **two** in terms of the purchasing's department's current involvement in this activity. The rapid pace with which technology is expanding may make the products of a particular enterprise and its production process obsolete. In this regard, at least

four factors need to be considered, namely, quality, cost, risk and performance. The tools for assessing each of these factors are readily available in the purchasing department. Ideally **technology planning** should be a highly rated strategic responsibility of purchasing and findings of the study suggest this. To avoid this risk, design engineers prefer to use the latest technologies available. This finding suggest that the industrial enterprises surveyed for the purpose of this study are responding to the changes in the global market place by introducing innovations in process, product technologies, product development and manufacturing cycles.

7.7.3 New product development

Variable number seven, namely, **new product development** as the purchasing's department's current involvement in strategic activity is ranked number three. This suggests that purchasing's role in new product development is substantial. Indeed buyers can help avoid unnecessary costs and cut cycle time significantly due to their familiarity with technologies (ranked number two), costs, lead times and sources of supply. Purchasing utilises the opportunity to bring in key suppliers in an advisory role to further facilitate cost avoidance and time to market. With early supplier design involvement, key suppliers participate during the product development process or early design phases. When managed properly, early supplier design involvement has a significant impact on purchasing effectiveness. The involvement of purchasing is essential to the success of a new product because of its knowledge of the supply chain.

7.7.4 Value analysis and value engineering

Value analysis and value engineering as a strategic involvement of purchasing is rated number four. The strategic emphasis of value analysis is cost reduction which is the prerogative of purchasing. In this regard the enterprises that were surveyed for the purposes of this study, purchasing organises and promotes cost consciousness in all departments of the enterprise. Value analysis and value engineering is a vigorous cost reduction technique. Its place in the product life

cycle cannot be overemphasized. This has major implications for total quality management and quality assurance. This would also entail the avoidance of flaws in design rather than remediating them.

7.7.5 Capital project investment planning

Capital projects and investment planning is conceptually comparable with materials requirements planning and therefore ranked number five. The current and planned manufacturing orders from the materials requirements planning provide the input for the detailed production line planning. Planning the production programme requires consideration of the adequacy of manufacturing facilities. The production budget is usually related to the capital additions budget with respect to plant additions required, extraordinary repairs and disposal. Purchasing from a strategic point of view certainly has a significant role to play. Buyers are usually creative facilitators, co-ordinators and consultants to management when it comes to purchasing of capital goods.

7.8 ROLES AND RESPONSIBILITIES IN TERMS OF THE FUTURE INVOLVEMENT OF PURCHASING

Table 7.13 present the roles and responsibilities in terms of the future involvement of purchasing in major corporate activities. The ranking of roles, responsibilities in terms of the current involvement of purchasing generated in the previous table is reflected in brackets (). Respondents were required to indicate on a three point Likert scale, the extent to which their involvement would 1 decrease, 2 remain the same and 3 increase. The findings are reflected in Table 7.13.

The findings suggest that the involvement of purchasing in each of the sixteen roles/responsibilities will either remain the same or increase marginally. Table 7.14 presents numerous interesting data. However, within the confines of the study four items will be singled out for discussion. These include **government relations** (ranked number 10 in terms of current involvement and 1 in terms of future involvement),

corporate mergers/acquisitions/alliances (ranked number 12 in terms of current involvement and 2 in terms of future involvement), **financial cash flow planning** (ranked number 14 in terms of current involvement and 3 in terms of future involvement) and **corporate strategic planning** (ranked number 11 in terms of current involvement and 4 in terms of future involvement).

TABLE 7.13
RANKING OF ROLES, RESPONSIBILITIES IN TERMS OF THE
INVOLVEMENT OF PURCHASING IN THE FUTURE

Variable	Role - Responsibility - Involvement	Ranking	
47 and 92 1	Corporate strategic planning (Long term)	(11) 4	Mean 2,21 Standard Deviation 0,66 Lower quartile 2 Upper quartile 3
48 and 93 2	Corporate Mergers/Acquisitions and Alliances	(12) 2	Mean 2,22 Standard Deviation 0,61 Lower quartile 2 Upper quartile 3
49 and 94 3	Technology planning	(2) 5	Mean 2,19 Standard Deviation 0,65 Lower quartile 2 Upper quartile 3
50 and 95 4	Capital project investment planning	(5) 14	Mean 2,12 Standard Deviation 0,60 Lower quartile 2 Upper quartile 3
51 and 96 5	Value analysis and value engineering	(4) 8	Mean 2,16 Standard Deviation 0,53 Lower quartile 2 Upper quartile 2
52 and 97 6	Marketing planning	(1) 6	Mean 2,17 Standard Deviation 0,65 Lower quartile 2 Upper quartile 3

53 and 98 7	New product development	(3) 11	Mean 2,12 Standard Deviation 0,57 Lower quartile 2 Upper quartile 2
54 and 99 8	Information systems planning	(9) 7	Mean 2,17 Standard Deviation 0,61 Lower quartile 2 Upper quartile 3
55 and 100 9	Environmental planning	(7) 12	Mean 2,12 Standard Deviation 0,29 Lower quartile 2 Upper quartile 2
56 and 101 10	Financial Cash flow planning	(14) 3	Mean 2,2 Standard Deviation 0,55 Lower quartile 2 Upper quartile 3
57 and 102 11	Government relations	(10) 1	Mean 2,23 Standard Deviation 0,57 Lower quartile 2 Upper quartile 3
58 and 103 12	Outsourcing (Make or Buy)	(6) 9	Mean 2,14 Standard Deviation 0,57 Lower quartile 2 Upper quartile 2
59 and 104 13	International-countertrade - offset planning	(16) 13	Mean 2,12 Standard Deviation 0,55 Lower quartile 2 Upper quartile 2
60 and 105 14	Operations/production/ producibility	(8) 16	Mean 2,08 Standard Deviation 0,56 Lower quartile 2 Upper quartile 2
61 and 106 15	Service acquisition (travel; accommodation; car rental; advertising)	(15) 15	Mean 2,08 Standard Deviation 0,49 Lower quartile 2 Upper quartile 2
62 and 107 16	Economic forecasting	(13) 10	Mean 2,13 Standard Deviation 0,51 Lower quartile 2 Upper quartile 2

7.8.1 Government relations

The findings suggest that government relations feature as an important area of future involvement of the purchasing department. It was ranked lowly at number ten in terms of the current role/responsibility and number one in terms of the future involvement of purchasing. There is certainly an increasing effect of government on how enterprises operate. Government forces influence a range of factors including wages, equal employment opportunities, safety and health, environment constraints, plant location and trading policies. There may be laws and regulations that govern the way enterprises operate and these impact on the role of purchasing. Changes in government policies have a direct bearing on the functioning of the purchasing department. A typical example would include the Motor Industry Development Programme (MIDP) which contains various issues that affect the purchasing department in the automotive industry. The Duty Credit Certificate Scheme (DCCS) has major implication for the purchasing department in textile industry.

Following the release of the government economic strategy, manufacturing incentives were announced. These seek, amongst others, to encourage small and medium sized manufacturing and to restructure domestic manufacturing towards international competitiveness. There have been numerous measures and policies that have been introduced by the government and these impact on industrial enterprises. It is therefore not surprising that respondents for the purpose of this study have rated highly the future involvement of purchasing in government relations. Any strategic purchasing function must consider the appropriateness of the action in terms of government policy and political correctness.

7.8.2 Corporate mergers/acquisitions/alliances

This role/responsibility was ranked number twelve in terms of current involvement of purchasing. However, in terms of the future it is ranked number two as area of increasing involvement. Strategic partnership alliances is a strategic purchasing

activity and involves complicated financial issues. Purchasing departments are aware of guidelines that govern strategic alliances and therefore purchasing departments see themselves being involved in this activity. Purchasing's association with suppliers may give the enterprise a leverage in recognising worthy mergers and alliances.

7.8.3 Financial cash flow planning

Every purchase represents an expenditure or commitment of the funds of the enterprise. Purchasing and finance need to work closely on issues affecting investment in inventory. Purchasing seems to be consulted when major purchases are made. Payment practices of the finance department, availability of funds and finance related terms and conditions must be discussed for strategic purchasing to occur. Regular reports from purchasing need to be submitted for proper cash flow planning. This role/responsibility was ranked number fourteen in terms of current involvement of purchasing. However, in terms of the future it is ranked number three as area of increasing involvement.

7.8.4 Corporate strategic planning

The literature findings presents the evolution of purchasing from transactional to tactical and thereafter to strategic. The findings of the study suggests that many purchasing departments perceive themselves as having transcended the transactional and tactical stages of the evolution and can become involved in the area of strategy formulation and planning. This role/responsibility was ranked number eleven in terms of current involvement of purchasing. However, in terms of the future it is ranked number four as area of increasing involvement.

Generally, the movement of purchasing into the area of strategic planning is not an easy one. It requires new skills and changing philosophies. The empirical findings indicate a change in emphasis by the purchasing departments. Purchasing perceives itself as a in many enterprises. This study has ascertained the varied extent of the

task of purchasing. This brings new expectations and demands with it and purchasing can continue to be useful only if it reacts productively. Given the new emphasis, suppliers literally become part of the buying enterprise's technology, productivity, end-market satisfaction and profit plan. Success in industrial enterprises depends on recognising the importance of strategic planning. It is no doubt that the industrial enterprises surveyed ranked the involvement of purchasing in corporate strategic planning relatively high.

7.9 INFORMATION SOURCES AND THE THREE BUYING SITUATIONS

Seven distinct sources of information were identified. These include personal salesmen (visit by supplier), technical sources, personnel in the enterprise, purchasing agents in other enterprises, trade associations, advertisement in trade journals and vendor files together with trade registers internet and the use of the worldwide web. The seven information sources were then ranked for each of the buying situations. The literature survey supports the proposition that the three buyclass situations are perceived to be in a hierarchy of risk. The new task situation has the greatest perceived risk, while the risk associated with modified rebuy is greater than the risk associated with a straight rebuy. The findings of this study has major implications to industrial marketers.

Table 7.14 reflects the sources of information that are utilised by the various manufacturing enterprises surveyed in this study. Seven sources of information were identified and are shown in Table 7.14. The mean values were determined and the ranking is presented in the table. For all three buying situations, namely new task situation, modified rebuy and straight rebuy, **personal salesmen** (visit by the supplier) was ranked number one. This is consistent with the functional relationship involving perceived risk. The study does not support the view that the higher the risk, personal sources of information are preferred. Personal sources of information were preferred across all buyclass situations. Personal sources probably helps insulate the buyer's enterprise against competition. Vendor files, trade registers, internet and the use of the worldwide web as information source was lowly ranked for all three buying

situations. **Personnel in the enterprise** as an information source was ranked seven for a new task buying situation but highly ranked at number two in respect of modified rebuy and straight rebuy situations. This is an interesting finding in that personnel in the enterprise present new ideas and possible criticisms with the industrial product and modifications are then made to the various industrial products. This probably supports the notion that word-of-mouth communication from professional colleagues may form a significant source of information for buying personnel. The existence of a significant differential preference for sources of information as a function of the buying situation could not be established in this study. There were no significant differences between preference in all three buying situations. Personnel in the buying enterprise play a meaningful role in modified rebuy and straight rebuy. A rank order correlation co-efficient of 0,87 with $p < 0,01$ suggest that there is a close correlation with sources of information used by purchasing staff for the different buying situations.

TABLE 7.14
SOURCES OF INFORMATION AND THE BUYING SITUATIONS

Variables	Sources of Information	Ranking New Task Situation	Ranking Modified-Rebuy Situation	Ranking Straight Rebuy
71, 78 and 85 1	Personal salesman (visit by supplier)	1	1	1
72, 79 and 86 2	Technical Sources	2	3	3
73, 80 and 87 3	Personnel in your enterprise	7	2	2
74, 81 and 88 4	Purchasing agents in other enterprises	5	4	4
75, 82 and 89 5	Trade Associations	3	7	6
76, 83 and 90 6	Advertisement in trade journals	4	6	7
77, 84 and 91 7	Vendor files, trade registers, internet and the use of the worldwide web	6	5	5

7.10 SOLE SOURCING AND DIFFERENT INDUSTRY TYPES

Table 7.15 presents the prevalence of sole sourcing amongst the various industry types. Sole sourcing is not an extensively used purchasing strategy among the enterprises surveyed in this study as reflected by the 47,3 percent that engages in sole sourcing and 52,7 percent that does not engage. However, the prevalence of sole sourcing is higher among large enterprises (51,9 percent) when compared with small enterprises (45,9 percent) and medium enterprises (46,9 percent). The low prevalence of sole sourcing among small and medium enterprises may best be explained in terms of access to financial resources. Multi-sourcing presents small and medium enterprises with the opportunity to use borrowed capital from a wider group of suppliers (credit providers) and thereby use one supplier against another.

Supplier apathy could also be a reason for the low level of single sourcing among industrial enterprises. Small industrial enterprises may be seen as undesirable markets by suppliers and therefore do not get high priority customer ratings. Therefore the emphasis of purchasing will be the identification of improved or alternative sources of supply. This requires a pool of potential suppliers.

TABLE 7.15
SOLE SOURCING AND DIFFERENT INDUSTRY TYPES

		SOLE SOURCING		
		YES	NO	ROW TOTALS
S	SMALL	34 45,9%	40 54,1%	74 49,3%
	I	23 46,9%	26 53,1%	49 32,7%
Z	LARGE	14 51,9%	13 48,1%	27 18,0
E	COLUMN TOTALS	71 47,3%	79 52,7%	150 100%

7.11 THE SIZE OF INDUSTRIAL ENTERPRISE AND PROPORTION OF SOLE SOURCING

Table 7.16 reveals the extent of sole sourcing in terms of the proportion of total purchase for each industry type. The table shows that those enterprises that engage in sole sourcing, 97,2% indicated that sole sourcing accounts for less than 20 percent of their total purchase. As a cost reduction strategy sole sourcing is not used extensively.

TABLE 7.16
THE SIZE OF INDUSTRIAL ENTERPRISE AND PROPORTION OF SOLE SOURCING

		PROPORTION OF TOTAL PURCHASE			ROW TOTALS
		0% - 10 %	11% - 20%	21% - 50%	
S	SMALL	24 70,6%	10 29,4%	0 0%	34 47,9%
	I	MEDIUM	17 73,9%	4 17,4%	2 8,7%
Z	LARGE	9 64,3%	5 35,7%	0 0%	14 19,7%
E	COLUMN TOTALS	50 70,4%	19 26,8%	2 2,8%	71 100%

7.12 THE SIZE OF INDUSTRIAL ENTERPRISE, SOLE SOURCING AND DESCRIPTION OF PURCHASES

Table 7.17 presents the findings of the study in terms of the size of the industrial enterprise engaging in sole sourcing and the description of the purchases in terms of volume and cost. The findings suggest that 57,7 percent of the enterprises indicated that goods that are sourced from a sole supplier can be described as high cost and low volume purchases and 26,8 percent of the enterprises described their purchases made from a sole source as high cost and high volume. The higher the cost of the product, the more likely an enterprise will engage in sole sourcing. The findings clearly

indicate that there is a strong correlation between the cost of the industrial product and sole sourcing. The higher the cost the higher the possibility that buyers would engage a sole supplier. Volume of purchase does not seem to be a factor in sole sourcing.

TABLE 7.17

THE SIZE OF INDUSTRIAL ENTERPRISE AND SOLE SOURCING AND DESCRIPTION

		DESCRIPTION OF PURCHASE				
		Low Cost and Low Volume	High Cost and High Volume	Low Cost and High Volume	High Cost and Low Volume	ROW TOTALS
S	SMALL	1 2,9%	8 23,5%	6 17,6%	19 55,9	34 47,9%
	MEDIUM	0 0%	8 34,8%	2 8,7%	13 56,5%	23 32,4%
Z	LARGE	0 0%	3 21,4%	2 14,3	9 64,3%	14 19,7%
E	COLUMN TOTALS	1 1,4%	19 26,8%	10 14,1	41 57,7	71 100%

7.13 REASONS FOR SOLE SOURCING

Five reasons were identified for sole sourcing and these are reflected in Table 7.18. All enterprises surveyed were required to indicate the most important reason for sole sourcing. This is reflected in Table 7.18.

From Table 7.18, quality associated reason is ranked as the most important reason, followed by, close proximity of supplier (number two), cost consideration associated with service (number three), price consideration (number four) and finally reliability of supply (number five).

TABLE 7.18
RANKING REASONS FOR SOLE SOURCING
 (n = 150)

	REASONS	FREQUENCY	RANKING
1	Pricing consideration	16	4
2	Reliability of supply	10	5
3	Close proximity of supplier	26	2
4	Cost consideration associated with service	18	3
5	Quality associated reasons - Standardisation	80	1

However, Table 7.19 shows that those enterprises that actually engaged in sole sourcing present a somewhat different picture. Quality is still ranked number one, cost consideration associated with service is ranked number two, close proximity of supplier is ranked number three, pricing consideration is ranked number four and finally reliability of supply is ranked number five.

TABLE 7.19
REASONS FOR SOLE SOURCING AMONG THE VARIOUS INDUSTRIAL ENTERPRISES
 (n = 71)

	1 PRICING	2 RELIABILITY	3 PROXIMITY	4 COST CONSIDERATION	5 QUALITY	ROW TOTALS
SMALL	2 5,9%	0 0%	5 14,7%	4 11,8%	23 67,6%	34 47,9%
MEDIUM	3 13,0%	1 4,3%	3 13,0%	4 17,4%	12 52,2%	23 32,4%
LARGE	0 0%	0	0	1 7,1%	13 92,9%	14 19,7%
TOTALS	5 7,0%	1 1,4%	8 11,3%	9 12,7%	48 67,6%	71 100%

7.14 SOLE SOURCING AND ORGANISATIONAL TYPE

Table 7.20 presents data pertaining to sourcing and the different organisational types of purchasing departments. Sole sourcing is conducted almost equally by those industrial enterprises having centralised and decentralised purchasing departments. There is no significant differences between centralised purchasing and decentralised purchasing in respect of sole sourcing. However, those industrial enterprises that exhibit a combination of both centralised and decentralised purchasing engage in sole sourcing to a lesser extent than the other two types.

TABLE 7.20
SOLE SOURCING AND ORGANISATIONAL TYPE

ENGAGING IN SOLE SOURCING			
	YES	NO	ROW TOTALS
CENTRALISED	22 51,2%	21 48,8%	43 28,7%
DECENTRALISED	19 54,3%	16 45,7%	35 23,3%
COMBINATION OF BOTH	30 41,7%	42 58,3%	72 48,0
COLUMN TOTALS	71 47,3%	79 52,7%	150 100%

7.15 SOLE SOURCING AND PARTNERSHIP RELATIONSHIP

The majority of industrial enterprises that engage in partnership relationship also engage in sole sourcing. One possible reason for this trend can be the role of the government in the promotion of small and medium industrial enterprises. Each reason for sole sourcing compels the need for a partnership relationship.

TABLE 7.21
SOLE SOURCING AND PARTNERSHIP RELATIONSHIP

ENGAGING IN SOLE SOURCING			
	YES	NO	ROW TOTALS
PARTNERSHIP RELATIONSHIP YES	60 78,9%	16 21,1%	76 50,7%
PARTNERSHIP RELATIONSHIP NO	11 14,9%	63 85,1%	74 49,3%
COLUMN TOTALS	71 47,3%	79 52,7%	150 100%

Table 7.21 presents the extent of sole sourcing and partnership relationship. This is reflected by the 78,9 percent in Table 7.21 as compared to 14,9 percent who engage in sole sourcing but do not engage in partnership. Furthermore, 21,1 percent who engage in a partnership relationship do not engage in sole sourcing and finally 85,1 percent who do not engage in sole sourcing also do not engage in a partnership relationship.

7.16 REASONS FOR MULTI-SOURCING

The reasons for multi-sourcing are presented in Table 7.22. These include pricing consideration: using one against the other (ranked number 2 *statistically ranked 1,5* has the same frequency as ensuring reliability of supply), improving quality (ranked number 5), close proximity of suppliers (rank number 1), reasons associated with affirmative buying (rank number 4) and ensuring reliability of supply (rank number 2 *statistically ranked number 1,5* has the same frequency as pricing consideration - using one against the other). Reasons associated with close proximity of suppliers (rank number one) indicates that buying enterprises are embodying social responsibility attributes. The support for suppliers in close proximity necessitates the development of suppliers.

TABLE 7.22
RANKING REASONS FOR MULTI SOURCING
 (n = 150)

REASONS	FREQUENCY	RANKING
Pricing consideration (using one against the other)	32	2
Improving quality (using one against the other)	19	5
Close proximity of suppliers	37	1
Reasons associated with affirmative buying	30	4
Ensuring reliability of supply	32	2

Table 7.23 gives the reasons for multi-sources in terms of the different industry types. The close proximity and reliability factors seem to be the main reasons for multi sourcing.

TABLE 7.23
REASONS FOR MULTI-SOURCES IN TERMS OF THE DIFFERENT INDUSTRY TYPES

	1 PRICING	2 QUALITY	3 PROXIMITY	4 AFFIRMATIVE BUYING	5 RE- LIABILITY	ROW TOTALS
SMALL	3 8,8%	2 5,9%	8 23,5%	7 20,6%	14 41,2%	34 47,9%
MEDIUM	4 17,4%	6 26,1%	4 17,4%	4 17,4%	5 21,7%	23 32,4%
LARGE	3 21,4	0 0%	6 42,9%	3 21,4%	2 14,3%	14 19,7%
TOTALS	10 14,1%	8 11,3%	18 25,4%	14 19,7%	21 29,6%	71 100%

7.17 CONCLUSION

The findings of the empirical study are presented in this chapter. The hypothesis that there is a strong correlation between the degree of importance of current purchasing

activities and the degree of emphasis over the following five years can be accepted. Using the Spearman Rank Correlation, a correlation co-efficient of 0,77 ($p < 0,01$) was obtained. The current practices that characterise the scope of the purchasing function will be consistent over the following five years. This finding was consistent among all industrial types, namely small, medium and large.

The second hypothesis that among industrial buyers there is a high degree of sensitivity to satisfactory product performance. This is reflected by the high ranking of total quality management as a degree of importance and as a degree of emphasis over the following five years. The correlation co-efficient of the current degree of importance of total quality management and the degree of emphasis over the following five years is 0,94 ($p < 0,01$).

The hypothesis that purchasing is a joint decision involving more than one person can be rejected. The use of cross functional teams ranked twenty in terms of current degree of importance and fifteen as a degree of emphasis over the following five years. The correlation co-efficient between the current degree of emphasis of cross functional purchasing teams and the degree of emphasis over the following five years is 0,49 ($p > 0,05$).

The study ascertained that the prevalence of partnership relationship between buying and supplying enterprises in small, medium and large enterprises is the same. The degree of partnership relationship was almost equally dispersed among small, medium and large enterprises.

Whether price is the most important buying criterion in a partnership relationship, the study ascertained that in small and medium enterprises, price was the most important criterion. However, in large enterprise price was ranked number three. That price is the most important buying criterion in a partnership relationship can be rejected. (Chi-square 0,410 D F 2 and $p > 0,05$)

In determining whether sole sourcing is used more extensively by large enterprises

as compared to small and medium enterprises, it was found that sole sourcing is not an extensively used purchasing strategy among the enterprises surveyed in this study as reflected by the 47,3% that engages in sole sourcing and 52,7% that does not engage. However, the prevalence of sole sourcing is higher among large enterprises (51,9%) when compared with small enterprises (45,9%) and medium enterprises (46,9%). (Chi-square 0,281 D F 2 $p > 0,05$)

The hypothesis that there is a positive correlation between sole sourcing and partnership relationship is acceptable. The correlation co-efficient is 0,78 and ($p < 0,01$).

The empirical findings indicate that the saliency or value importance of attributes of the seven information sources do not vary as a function of the three buy classes, namely new task situation, modified rebuy and straight rebuy. The rank order correlation co-efficient is 0,87 and $p < 0,01$.

Finally, whether purchasing personnel are extensively engaged in strategic corporate activities, the findings of the study suggest that there is very little or negligible involvement of purchasing in strategy formulation.

PART C

STRATEGIC ISSUES IN PURCHASING MANAGEMENT FOR MANUFACTURING ENTERPRISES

Diverse ideas about the requirements for effectiveness in industrial purchasing strategy have been developed in the previous parts. In this part, these ideas will be further considered and summarised consistent with the findings of the study. This part yields unique insights into purchasing and supply management's changing future role in the enterprise within the context of the findings of the study.

To commence this part it would be useful to consider the following analogy, **a sports comparison**, that has been adapted. The author of the original idea is not known. If one can imagine oneself to be a fan at a sporting event, ten years from now. As the announcer introduces the teams, one finds a number of favoured players have disappeared and their places have been taken by many foreign contract players, many of whom are players on other teams and in other sports as well. After the teams have been announced, the next message that is announced is that for this game the traditional rules and equipment are changed.

Within a sports context this may sound a bit improbable, but in business and government, this is precisely what is occurring. The implications for the effective management of supply are astonishing. Occasionally, in sports, some professional players are so talented as to achieve star status in more than one sport. A sportsperson can for example be an excellent cricketer and hockey player. In these rare instances, it is interesting to see the concerns of the coaches and managers of the two different sporting codes as they worry about injuries, season overlap and divided loyalties. This is the result of the fact that coaches and managers are used to the team concepts where every player is exclusively engaged.

In business and government, the team concept is altering radically. Ideas like core business, downsizing and outsourcing have drastically changed the composition of the team. Furthermore, customer satisfaction, empowerment, total quality management, total cost of ownership, cycle time reduction, flexibility and the learning organisation have changed the responsibilities of management. As in the sports context, as well as in the successful enterprises of the future one will try to play with a team where at least half the players are not really on the team and where the rules have changed drastically. Few of today's sport managers and coaches would be comfortable in that environment. Not surprisingly, the challenge is equally great for managers in the non-sports environment. To stay within the sport metaphor, purchasing has been the provider of towels, uniforms and drinks for the team. This allowed the function to delight in the glory of the winning team, but the contribution, in truth, was minimal. The future perspective will require purchasing to be a player on the field contributing to the team's mission to win in every way possible.

It is undoubted that the key manufacturing responsibility is to create and seize business opportunities. This means accomplishing objectives in manufacturing that create markets, acquire new customers and secure sustainable advantages over competitors. Purchasing management, from a tactical point of view ought to be able to cut time and cost out of manufacturing. In the new era, the new requirement is to help convert these accomplishments into business opportunities. *A managing director once praised the purchasing manager who bragged about his accomplishments to top management. He had reduced quality costs substantially, cut the time from order entry to delivery from 120 days to 20 days and reduced overall manufacturing costs from 30 percent to 12 percent of sales. The purchasing manager was then questioned, what has these reductions given the enterprise of strategic value.*

Any purchasing manager will be able to improve quality and reduce costs but the new requirement is to help transform these into opportunities.

The findings of this study clearly indicate that the various purchasing departments have not as yet discarded the cost saving's only image. Implicitly, purchasing has to refocus efforts to a concern for more strategic considerations away from those more tactical issues centring on buying at the right price, right quantity, right supplier and right quality. The time has come to redefine and reposition the purchasing function.

In this final part, the major implications of the research findings shall be discussed. Strategic issues in purchasing of manufacturing enterprises will be recommended.

CHAPTER EIGHT

CONCLUSION AND RECOMMENDATIONS: STRATEGIC ISSUES IN PURCHASING MANAGEMENT - THE STRATEGIC CHALLENGE

8.1 INTRODUCTION

In the preceding chapters, the strategic problems and prospects facing an enterprise have been discussed within the framework of purchasing in manufacturing enterprises. By way of **summary**, it is now worth considering how the data presented in the previous part can become strategic competitive variables for the success of an enterprise. The core of any strategic plan is the manager's ability to extend his view beyond the boundary of the enterprise, away from those events and factors that are immediately controllable, to those less predictable.

The study has clearly ascertained that by transforming itself into a profession, purchasing will become a key contributor to competitiveness and performance. Enterprises that secure their buyers into rigid procedures demonstrate blind faith in suppliers and mistrust of their buyers. Overall, this chapter is a microcosm of all that is involved in the strategic purchasing activity. Consistent with this viewpoint on strategic thinking, this final chapter should indeed be a point of departure for further research and debate searching for the best practices.

8.2 RAISING A NEW DEFINITION OF STRATEGIC PURCHASING

Throughout the study, mention was made of the purchasing department's need to be more strategic. With some notable exceptions, this has been accompanied by an absence of credible explanation as to how strategic contribution can be seen or measured. A study of this nature should therefore raise a new performance-related definition of strategic purchasing. This study has described the involvement of purchasing in approaching and interacting with the supply market taking into account

not just the present situation but also how it might look in the future. The study also reflected the belief that the buyer can and should influence the supply market rather than accept it the way it is. When strategic purchasing is taking place, the following characteristics should be observed:

- **time** is available to conduct strategic purchasing;
- **target-setting** is truly ambitious;
- **the existence of structured processes** which lead to key decisions being made as a result of creative cross-functional teamwork;
- **well considered decision making techniques** are in place which can turn ordinary data into market intelligence;
- **approach to the supply market is a strategic one**, with purchasing tactics being selected according to need rather than the dictates of procedures;
- **co-ordinated action across the enterprise** is taken by teams which are totally committed to an overall strategy; and finally
- **the delivered results are of a treasured proportion**, usually far exceeding what might have been expected based on previous experience.

Strategic purchasing therefore requires the involvement of purchasing in a host of activities in order that the purchasing strategy can be formulated in conjunction with operational and technical strategies. This study has ascertained that many buyers are locked in **downstream** activities and are destined to stay there unless fundamental changes are made to remove the barriers standing between them and the best practice performance. Within this context, strategic purchasing should involve the segmentation of the purchased product into strategic commodity groupings which should enable the enterprise to develop short and long term business plans for each purchasing product grouping. These business plans should be focused on diminishing total cost and maximising the contribution towards the enterprises' business objectives. This requires enterprises to move away from the functional and transactional focused purchasing practices and move towards a process approach requiring linkages to the enterprises' business objectives, market intelligence, total cost decision making, cross functional input, a more integrated supply base, customer focus and management of the entire supply base. Invariably this entails the

maximisation of the value of the entire supply process.

Furthermore, this study has ascertained, inter alia, the following the strategic challenges:

the willingness of purchasing to free itself from routine purchasing processes and sometimes contentiously, some of the control that goes with them. They may be coupled with a new respect of the ability of management personnel in other functions to acquire commercial skills; and

a heavy emphasis on upstream purchasing activities. This includes a strong emphasis on purchasing activity in some of the expenditure areas which have not been traditional areas for purchasing activity. The emphasis is needed partly because of the intrinsic value that improved purchase processes can bring but also involvement in these areas brings purchasing much closer to strategic business issues. High-performing purchasing teams focus their efforts on upstream activities (such as supplier development, collaborating with internal users to develop new strategies, and understanding the supply market) before a contract is awarded.

The findings of this study suggest that South African enterprises are striving towards competitiveness. In today's highly rated total quality management environment, the purchasing function was found to be responsible for securing vital production and facilitating resources for the enterprise and also charged to provide quality service to its internal customers.

The effective management of the purchasing function shall assume great importance. Achieving competitiveness requires effective management of the productive and material resources of the enterprises. In their relentless search to achieve sustainable competitive advantage, enterprises should view purchasing not just as an infrastructural or support function but as a strategic weapon. Furthermore, the findings of the study clearly point, that part of the strategic purchasing process entails

an appreciation of an enterprise's relationship with its supply market and how this can contribute to the competitive advantage and ultimately profitability. In this regard, purchasing personnel need to link resource availability and supplier relationships with present and future market performance. As the importance and critical nature of purchasing increases, purchasing personnel can no longer focus attention solely on traditional supply markets. Attention must shift to those issues and factors that are of less immediate concern to the purchasing manager, but nonetheless, hold potential significant implication for the enterprise's future market viability.

The findings of the pilot study conducted for the purpose of this study suggest that the future is going to be a difficult one for many enterprises, functions and individuals. Difficult economic times, international competitive pressures, significant political, social and environmental concerns can be predicted. The purchasing function and those who work in the supply field will be influenced drastically. Purchasing has to contend with these challenges and innovative solutions have to be found.

8.3 THE IMPLICATION OF PROFESSIONAL PURCHASING STRATEGY

Conventional purchasing departments are essentially task focused. The traditional centralised, decentralised and hybrid structures essentially group people around the action, achieving work co-ordination by structuring who does what work. This approach does work well in some enterprises and may not add value. There is a growing awareness that corporate success requires exceptional performance from every function, including the supply side. This is what forces every function including purchasing into a more strategic role.

The literature on strategic purchasing strongly advocates that purchasing be significantly involved in major corporate activities beyond supply. The empirical research data obtained in this study does not reflect that this is actually taking place. Even outsourcing, which obviously, should require major purchasing's input, is shown to have dispassionately moderate purchasing involvement. In this regard a

major challenge for purchasing in becoming more involved in activities of a strategic nature still lies ahead. Participative approaches to assure a lower total cost of ownership; shorter new product market time; better quality; and greater synergy between internal and external customers, suppliers and purchasing have also been alluded to in this study.

Team building could be considered a new methodology of improving both motivation and results. Typical purchasing initiatives include various forms of teams involving other internal functions, suppliers and customers. The research has shown that the current use of these approaches was extremely low. From a strategic viewpoint, significant increase in the use of teams can only be strongly recommended. Based on the findings, purchasing strategies can be viewed on three levels of managerial decision making. It is important to note that each kind of strategy requires a different type of environmental information and has a particular type of managerial focus.

Firstly, **achievement or performance related purchasing strategies** focus primarily on managing purchasing resources, controlling expenses, inventory management and serving user needs within the enterprise. Typically, these strategies require information generated internally and centre on issues relevant to purchasing efficiency. External environmental changes involving growing competition, increasing complexity of products, supply sources and market demand functions should change the character of the purchasing function internally in a fundamental way. Purchasing has to evolve from the traditional paradigm into an extremely diversified function requiring expertise in many aspects of the enterprise's operations. In this area enterprises surveyed in this study tended to score higher points.

Secondly, **rivalry or competition related strategies** which focus on the buyer's intrinsic bargaining power and on the competitive implications of purchasing related decisions. Key issues here converge on understanding those issues that permit buyers to develop methods for gaining maximum leverage with chosen suppliers. Supplier integration is of growing importance as tool for competitive advantage in a rapidly changing environment. Enterprises ought to make greater use of supplier integration

in the future and should be integrating suppliers at earlier stages of the new product development process. The potential benefits of supplier integration should justify the effort. The points scored in this area tended to be low. The reason for this probably lies with the job profiles of purchasing staff. Competent purchasing staff ought to have knowledge on how to add value, conduct thorough analysis of products and processes and build coalitions with suppliers. Purchasing management should take advantage of the opportunities created by the competitive environment.

Finally, **system related strategies** encompass such issues as supplier analysis, value analysis and supplier development. These strategies attempt to improve the level of co-operation and co-ordination among all the internal departments and external organisations involved in the purchasing process. It is important to recognise that the development and successful execution of these strategies are necessary in order for purchasing to appreciate fully the importance of competition related strategies. System related strategies should be formulated in accordance with the enterprise's strategic business priorities and its core competencies. Again the points scored by enterprises in this study were extremely low. From the study it can be gathered that top management does not believe fully that purchasing has the potential to increase the enterprise's competitive advantage. At the minimum, top management must support purchasing's initiatives. Ideally, top management should create an environment where opportunities are presented and purchasing can take full advantage.

The challenge that faces personnel associated with purchasing strategies is to get the message across about purchasing's contribution to the enterprise. Changing the mindset may be a formidable task.

8.4 JOB PROFILES OF PURCHASING STAFF

In this study, there is evidence of a shift in the tactical versus strategic orientation of purchasing. Activities such as expediting, receiving and inventory control become less important as the main responsibility of purchasing while strategic purchase planning and supplier quality assurance gain importance. So what can buyers who are

submerged in a high tide of tactical tasks do to refocus their efforts and maximise impact. Enterprises should expect a gradual shift away from narrowly defined tactical/functional responsibilities to activities that are more externally integrated and strategic in scope. Before the purchasing department can have a significant impact on the strategic planning process, the purchasing department must be viewed by top management as the competency centre for all matters dealing with the supply environment. Central to the notion of developing purchasing as a competency centre is the ability of the purchasing department to broaden its focus and think beyond the traditional role of the purchasing department. It is clear from the data that when the purchasing decision is seen as central to the enterprise, the environmental and supply market factors considered by the purchasing department convey a more long-range, total enterprise orientation. While such an orientation may not be appropriate for every purchase product segment, it is important that purchasing managers appreciate the need for such a perspective when the purchasing context requires it.

Reference has been made to the concept job analysis which involves breaking down an occupational area into separate units and elements which combine to represent an occupational role. It is questionable as to whether there is an absolute and objectively defined role especially in purchasing. Job analysis may be suitable for low level job roles which are generally low in skills and knowledge content and consist of a small number of relatively simple activities performed frequently. However, from a strategic viewpoint job roles is determined not only by the application of skill and knowledge but also by individual reflection on previous experience, reference to ethics and values, identification of higher order skills such as monitoring, scanning and reading the environment, balanced judgement, intuition and political acumen, filtering and gathering relevant information.

Purchasing, materials and logistics management as an identifiable function may become obscure or even obsolete as it becomes more fully integrated through multidisciplinary commodity sourcing teams to design and manage demand-supply chains. The classical functions of marketing, manufacturing, engineering, purchasing, finance and human resources will be less important in defining work. Generally the

literature survey suggest that more people will take on project work focused on continuous improvement of one kind or another. Strategic purchasing hinges on the flow of information and the ability to convey to other departments and upper management a perspective that integrates the purchasing function into the total enterprise. This in essence suggests that the absolute number of jobs within purchasing as a department will decrease. There will be less emphasis on hierarchy and less distinction between positions. The new strategic approaches suggested throughout the study carry major implications for the deployment of human resources. Teamwork and the delegation of responsibility represent a threat to a more authoritarian style of management. The question that needs to be answered is what good are decision making tools if the buyer is inhibited by rigid purchasing procedures?

The introduction of cost reduction initiatives recommended in this study affect the cultural environment which surrounds the enterprise. Cost reduction initiatives is a broad category that includes a number of different purchasing activities, processes or strategies. Enterprises expecting to emphasize cost reduction initiatives also expect to emphasize certain purchasing activities to achieve reduction targets. This study reveals that there exists a direct relationship between enterprises expecting to emphasize cost reduction initiatives and the following purchasing activities; cost-based pricing, use of buyer/supplier consulting teams to focus on continuous improvement at suppliers, supplier development programmes, quality-improvement initiatives with suppliers, supplier performance evaluation, electronic data interchange systems and the use of cross functional purchasing teams.

Proactive purchasing staff are the ones that add value to the overall business enterprise through the various purchasing processes. They also seek to add quality to the products and services offered by the enterprise and are able to manage cost. The processes identified in this study include total cost management, early purchasing involvement in several areas of strategy formulation and new products, early supplier involvement in product development and outsourcing. Furthermore, proactive purchasing staff adds value through the use of data management to integrate the entire

supply chain.

8.5 PURCHASING'S ABILITY TO AFFECT CORPORATE PLANNING

One of the findings of the study is that the strategic importance of purchasing will increase in the future. Purchasing will become a key element of business strategy. This trend will cast the role and importance of purchasing in sharper focus than ever. Although the data do not address specifically actual methods utilised by purchasing managers to influence corporate planning, a set of potential strategies for doing so can be extracted from these results. This relates to how purchasing personnel resolve decision conflict associated with purchase of the commodity for which they are responsible. The gathering of additional product/supplier information is viewed as the most widely utilised conflict reduction mechanism. While knowledge and information appear as the key to conflict resolution, purchasing managers will rely also on their social skills to diffuse potential conflict reduction mechanism. It becomes clear that a new breed of purchasing managers must be concerned with purchasing related strategies that enhance corporate profitability.

The study did not attempt to determine minimum educational qualifications necessary for purchasing personnel. However, if enterprises endorse purchasing from a service perspective, this reduces the need for staffing with high quality personnel since opportunities for return on investment are seen as minimal. In addition, if purchasing is not perceived as a strategic profit contributing function, then obviously purchasing staff will be poorly paid personnel who will lack a broad array of analytical, communication, decision making and business leadership skills. Proactive purchasing is the central condition that creates purchasing influence in corporate strategic planning.

From a strategic purchasing viewpoint, the findings of the study have highlighted current deficiencies among purchasing's ability to recognise, track and assimilate certain pertinent environmental and supplying market factors into their purchasing decision processes. Interestingly, some of the problems may be attributed to

purchasing's perception regarding upper management's performance expectations and should not be assumed to lie solely with purchasing's inability to understand the need for a more sophisticated analysis of environmental and supply market factors. Having determined both the perceptions of management and purchasing's present task responsibility during various phases of the buying process, it is clear that an opportunity exists for purchasing to both improve its own strategic planning process, while at the same time, contributing to its corporate visibility and influence. Differences in the degree of risk and importance associated with the purchasing context suggest that different purchasing related strategies are appropriate for different kinds of purchases. Clearly, the more central the purchase is to the enterprise, the more likely will purchasing related information focus on and the resultant strategy enacted build on competitive market factors. The findings sensitises purchasing personnel to the need to better define significant environmental trends, to identify specific and appropriate strategic responses and to recognise the potential impact of purchasing related decisions on corporate competitiveness.

8.6 PURCHASING'S SERVICE IMAGE - A CRITICAL PERSPECTIVE

The findings clearly reveal that purchasing professionals have seen themselves as managing a service function. They support, *inter alia*, manufacturing operations, marketing, engineering, research and development and special projects. This perspective has been accepted for decades. The usefulness of the service perspective has been its reinforcement that needs generated elsewhere in the enterprise had to be satisfied. The famous: *the provision of the right goods of the right quality, and in the right quantity at the right time and the right place with the right services and support at the right price*, appears as an introduction to every course in purchasing.

The service viewpoint also fits the notion that separation is required between those who specify acquisition requirements, those who use what is required, those who purchase and those who pay. Keeping these groups apart served the financial and audit requirements with respect to misappropriation of funds, the minimisation of fraud and the compliance with procedures. Some of the more enterprising

practitioners viewed their relative independence as an opportunity to experiment and widen the boundaries of their field. It is the latter aspect that has been the best outcome from this period of clutching to the service viewpoint. An impressive body of knowledge, full of theoretical tools, concepts and skills have been built over the years, leading to professionalism. The service perspective or viewpoint has probably been useful and necessary stage in the evolution of the profession. The problem with the traditional service perspective is that it prevents the profession from moving where the future demands that it should go. The traditional service viewpoint places the purchasing function into a compartment, where requisitions come in and orders go out.

This study categorically pointed out that multiple influencers exist for every purchase. Proper supplier selection is impossible without appropriate recognition of the stakeholders involved. Ideas and tools such as value analysis, standardisation, lean production, can never fully exploited within the service viewpoint. These tools require too many inputs from outside the compartment and at the same time are not seen as sufficiently service oriented. Too many improvement opportunities can be missed when adopting the service perspective.

Furthermore, this study illustrated that the service perspective puts purchasing into a chronology that favours sequential rather than simultaneous action, thereby adding time delays and missing opportunities for early supplier involvement. The service perspective reduces the need for high quality staff, since opportunities for strategic improvements and decisions are seen as minimal. The focus of internal rather than external customers also has potential dangers. It is easy to lose sight of the real external customers' needs, assuming that internal customer satisfaction is all that is important and sufficient. For any enterprise to be competitive, its suppliers have to be competitive. This requires the purchasing function to be strategic in its contribution, and impact on the performance of others in the enterprise. The service perspective or viewpoint is outmoded.

8.7 PURCHASING MANAGEMENT AND SUPPLY CHAIN MANAGEMENT

The theoretical discussion of this study conclusively suggested that developing sustainable competitive advantage depends on developing competencies that are not easily duplicated by competitors. Suppliers and the way an enterprise relates to them must provide a competitive edge. As more and more enterprises are turning to outsourcing and concentrating on their core business, the need to gain a competitive edge on the supply side has increased substantially. The findings confirm that the purchasing function will deviate from its traditional role as gatekeeper for all communications with suppliers. Direct communication between suppliers and other functions within the enterprise without having to go through purchasing may increase in the future. As firms outsource more the need for communication, co-ordination, control and planning of interactions will become evident. Purchasing's task will be a strategic one in this regard. If this trend becomes a reality, purchasing managers may require interdisciplinary and multidisciplinary training. This assertion is also supported by the focus group discussions held with the twelve enterprises reported in Chapter Six of this study (refer section 6.2.2).

Internal teamwork will become a prerequisite for external teamwork with customers and suppliers. To get an external customer recognised as an additional member of the team adds a totally new dimension to purchasing. Purchasing is going to open up the gateway to suppliers. The various attempts by organisations to create strategic alliances, preferred suppliers, single source and partnering types of arrangements with suppliers can be seen to contribute in two ways: Firstly, the benefits which are not attainable in standard arm's-length, competitive and non-trusting mode, and secondly, they must be seen as an attempt to substitute for internal relations lost due to outsourcing and necessary for corporate success. Co-operative arrangements with suppliers require far more in terms of top management and interfunctional contact with the purchasing department as well as across the peer functions in the industrial marketing enterprise. It is very difficult for a co-operative buyer-supplier relationship to flourish without effective co-operation and teamwork inside the buyer's organisation. Getting more from suppliers will require a different approach and

structure internally.

8.8 PURCHASING MEASUREMENT AND EVALUATION

If the recommendations of this study is acceptable, purchasing measurement and evaluation will become increasingly complex. The study categorically reflects that measurement areas should reflect purchasing's contribution to corporate level goals and not simply functional performance objectives or narrowly defined efficiency measures. New measurement areas will require computerised measurement systems to assess purchasing's progress towards stated objectives. However, purchasing measurement and evaluation should not restrict or discourage individual creativity or result in unintended consequences. The theoretical review noted that performance measurement and evaluation is critical for identifying purchasing's progress towards function and corporate objectives. Most firms however, experience various challenges when developing purchasing performance measures and measurement systems. These include, among others, a lack of management information system support, inadequate effectiveness measures, a lack of acceptable functional performance standards, an inability to measure team performance or cross functional interaction and historical focus on functional goals without linkages to the corporate goal-setting process. Purchasing measurement and evaluation currently occurs predominantly within areas specific to the purchasing function. Current areas of measurement emphasis include, supplier quality; supplier delivery; adherence to standard or planned purchased item cost and finally cost reduction.

The traditional measurement areas will exist but more emphasis will be placed on purchasing's contribution on cycle time reduction, introduction of new technology from suppliers, reduction of purchasing process cycle time and the total cost of ownership. Cycle-time reduction includes reducing new product development cycle time.

As buyers grow in experience, more authority should be passed to them. Many enterprises deny buyers the authority that they are well able to use. The challenge

here is to persuade management that delegating more authority is not relinquishing control but rather replacing outmoded controls with the modern approach consistent with the demands of business, and the reality of a very complex and dynamic global supply environment. It is generally accepted that one cannot conceive of how good "best" really is until one starts reaching for it.

8.9 SEGMENTING THE INDUSTRIAL PRODUCT

The assumption that high-value contracts are the most important omits the fact that a low-value item, if unavailable or defective, can be the weak link that breaks the supply chain. How critical the supply and what purchasing strategy would be appropriate can be assessed using many of the supply positioning techniques outlined in the literature survey. Purchasing strategies for each of these categories should vary. The strategy for low value items with several suppliers will be to minimize the cost incurred in both acquisition and administration. However, high-value products with many suppliers that will respond to quick, sound judgments in the marketplace. Typically, they are readily available and provide the opportunity to reduce costs by careful use of competition and buying skills.

Purchasing strategy will focus on understanding the market and correctly timing entry to it. Low-value (sometimes high-volume/low unit-value) items with few suppliers, or involves major quality, safety or environmental issues, if purchased incorrectly, production will stop without them. The strategic aim is to ensure supply continuity and consistent quality. Items that combine high-cost and high-supply vulnerability are critical to the enterprise's profitability and competitive advantage and must be kept under the closest scrutiny at all times. In addition, strategy will focus on influencing supply performance and on contingency planning. Segmenting the industrial product may be a powerful tool for selecting purchasing strategy and has an additional advantage. It can answers questions, such as: how best to position supplier relationships? What skills do buyers need? What's appropriate for measuring purchasing performance? It also has the power to create awareness that purchasing is about external risk management and not solely about cost reduction.

Failure on the part of the purchasing department to segment the industrial product market would entail buyers losing advantages. Enterprises that often require buyers to always seek three competitive bids (the very worst approach if a cartel exists) or the opposite occurs, where all purchasing is done less formally by asking for some opening prices and then negotiating them down. Both these strategies are predictable and immediately subject buyers at a disadvantage. This is the result of the inability of the purchasing department to segment the industrial product. Enterprises that secure their purchasing professionals into rigid procedures are indicating that they don't trust the department or the buyer, but do have unquestioning faith in suppliers. Operating instructions that appear to provide tight control are, in fact, often wide open to manipulation by suppliers who can easily read a predictable plan. Buyers are often forced to circumvent hostile procedures just to get the job done. Segmenting the industrial product allows buyers to be selective in choosing the most appropriate process from a range of alternatives and the number of suppliers that should be invited to make offers.

Preferences for the various sources of information would vary for each segmented industrial product. Several descriptive aspects of this finding are contained in the literature study. Personal sources of information may be preferred when the demand for industrial products manifest high risks. The reverse of this relationship - as perceived risk decreases, the preference for non-personal sources of information increases. However, this is not readily supported in this study. In essence segmentation implicitly groups products into a hierarchy of perceived risk and buyers are in a position to formulate effective purchasing strategies.

8.10 PAPERLESS PURCHASING AS A STRATEGIC VARIABLE

The study clearly illustrates that paperless purchasing, for many industrial enterprise, is a distant goal. However, paperless purchasing is a reality. A fully-integrated system automatically faxes purchase orders to suppliers and, in the process, ties together purchasing, material control, receiving, and accounts payable in a tight, well-controlled manner. In today's advanced, technological world, the paper purchase

order (and other manufacturing systems and documents) probably has outlived its usefulness. Industrial enterprises should therefore be encouraged to engage in an integrated paperless system. The initial cost of setting up such a system may seem to be extravagant. However, enormous costs associated with acquisition of industrial products can be eliminated or reduced drastically.

In this regard an industrial enterprise needs to define the output requirements for a desired system. Specifically, the search ought to be for software to accommodate financial, accounting and inventory management needs together with the less complex sundry orders. Industrial enterprises should employ a cross-functional and cross-disciplinary approach to the tasks of needs assessment, product selection, installation, training and support for their new applications software. Once all of the necessary internal elements are in place, the supplier base may have to be brought in. This entails supplier notification, acknowledgment and in some cases training.

Fully integrated systems are expensive - not only in monetary terms, but also in the amount of work effort and corporate cultural changes that are required. The return for this investment, however, can be substantial. In addition to eliminating volumes of unnecessary paperwork and needless administrative work, the professional purchasing staff is freed up to really make a difference in how business is conducted. Rather than tracking down missing paperwork, effort is now concentrated on things like supplier base management, better reporting systems, improved communications, timely auditing, and management.

Information technology is a key in the transformation of purchasing into a strategic business function. It allows business to move at a much faster pace than ever before. Purchasing is therefore faced with the challenge of remaining abreast with a wide range of technologies that will further revolutionize the way in which business is conducted. However, it is not adequate to merely remain academically abreast on these technologies, the real challenge lies in finding ways to put the technology to use today to create value and competitive advantage.

8.11 CONCLUSION

This final chapter placed the findings within the premise that manufacturing enterprises are facing increased competition and are operating in a dynamic environment. The changes that are occurring include regulations, deregulations, globalization, advancing customer focused technology and services, growing quality requirements and constant cost improvement pressures. The strategic issues in purchasing management were identified within this context. These include strategic activities such as total cost management, early purchasing involvement in the enterprises strategic planning, early supplier involvement in new products and processes, longer term supplier alliances, outsourcing and involvement in strategic activities other than traditional purchasing. These issues involve forward-looking management who seek risk but at the same time add value to the enterprise. Tactical activities that simply addresses material requirements for internal customers should be conducted through the use of electronic media.

This chapter had also illustrated that strategically managing purchased goods and services positions manufacturing enterprises to turn these changes into a competitive advantage by leveraging the company's purchasing power and maximizing the contribution of the supply base through mutually aligned interests. The purchasing department clearly stands out as a strategic leader. The competitive environment is further characterised by the extent to which competing enterprises formulate new strategic advantages or the entry of new competitors into the market. The research findings in this regard indicate that when competitive forces increase, the enterprise should attempt to find new and creative ways to respond and further develop its own competitive advantage. One strategy for increasing competitiveness is to generate more value from the purchasing department through proactive purchasing processes. This can only be achieved by competent purchasing personnel.

Furthermore, this chapter offered specific plans on how strategic management of purchased goods and services can contribute to the enterprise's objectives. In order to achieve the overall objectives of the enterprise, the purchasing department must

clearly understand what are the strategic issues in purchasing management and must define its role in the change effort. In addition it must plan for implementation of the change throughout the enterprise. Within this context purchasing is identified as a constantly evolving function in its role as a marketer to the internal customers within the manufacturing enterprise, marketer to the external suppliers and a participant in the corporate management process. These can only be achieved if top management believes that purchasing has the potential to increase the enterprise's competitiveness and if top management supports purchasing's initiatives. The effect of this would be an increase of high quality purchasing personnel.

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ANNEXURE A - QUESTIONNAIRE USED IN THE MAIN SURVEY

QUESTIONNAIRE: THE FORMULATION OF PURCHASING STRATEGIES

1 DESCRIBE THE SIZE OF THE INDUSTRIAL ENTERPRISE (REFER NOTES)

SMALL	1	MEDIUM	2	LARGE	3
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2 WHICH CATEGORY BEST DESCRIBES THE PRODUCT MARKET OF THE ENTERPRISE?

Capital Goods	1	Consumer Goods	2	Industrial Goods	3
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3 Please indicate your enterprise's overall rating on customer satisfaction compared to your competitor (be candid)
1 Poor 3 Average 5 Outstanding.

Leave Blank

Overall rating on customer satisfaction	1	2	3	4	5	
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Place an X in the appropriate square to indicate the **degree of importance** of each of the factors listed in respect of your enterprise's competitive ability.

1 Totally unimportant and 5 Extremely important

Refer guide on how to use the 5 point Likert Scale.

Leave Blank

4	The use of cross functional purchasing teams	1	2	3	4	5	
5	Co-location of supplier and buying firms	1	2	3	4	5	
6	Supply-base reduction	1	2	3	4	5	
7	Increasing technical qualification of purchasing staff	1	2	3	4	5	
8	Total quality management	1	2	3	4	5	
9	Strategic sourcing management	1	2	3	4	5	
10	Strategic supplier alliances	1	2	3	4	5	
11	Reducing number of purchasing staff	1	2	3	4	5	
12	Just-in-Time deliveries	1	2	3	4	5	
13	Environmentally sensitive purchasing	1	2	3	4	5	
14	Reducing purchasing cycle time	1	2	3	4	5	
15	Strategic cost management	1	2	3	4	5	

16	Co-operative network of suppliers	1	2	3	4	5	
17	Shift from cost reduction to avoidance	1	2	3	4	5	
18	Time-based purchasing strategies	1	2	3	4	5	
19	Increased decision to buy rather than make (outsourcing)	1	2	3	4	5	
20	Reducing purchasing transaction costs	1	2	3	4	5	
21	Electronic data interchange	1	2	3	4	5	
22	Purchasing performance measurement systems	1	2	3	4	5	
23	Using supplier technical and design support	1	2	3	4	5	
24	International purchasing	1	2	3	4	5	

Place an X in the appropriate square to indicate the **degree of emphasis** on the following activities over the next five years to improve your competitive capability.

1 Decreasing Emphasis and 5 Increasing Emphasis

3 No change.

Refer guide on how to use the 5 point Likert Scale.

Leave Blank

25	The use of cross functional purchasing teams	1	2	3	4	5	
26	Co-location of supplier and buying firms	1	2	3	4	5	
27	Supply-base reduction	1	2	3	4	5	
28	Increasing technical qualification of purchasing staff	1	2	3	4	5	
29	Total quality management	1	2	3	4	5	
30	Strategic sourcing management	1	2	3	4	5	
31	Strategic supplier alliances	1	2	3	4	5	
32	Reducing number of purchasing staff	1	2	3	4	5	
33	Just-in-Time deliveries	1	2	3	4	5	
34	Environmentally sensitive purchasing	1	2	3	4	5	
35	Reducing purchasing cycle time	1	2	3	4	5	
36	Strategic cost management	1	2	3	4	5	
37	Co-operative network of suppliers	1	2	3	4	5	
38	Shift from cost reduction to avoidance	1	2	3	4	5	
39	Time-based purchasing strategies	1	2	3	4	5	

40	Increased decision to buy rather than make (outsourcing)	1	2	3	4	5	
41	Reducing purchasing transaction costs	1	2	3	4	5	
42	Electronic data interchange	1	2	3	4	5	
43	Purchasing performance measurement systems	1	2	3	4	5	
44	Using supplier technical and design support	1	2	3	4	5	
45	International purchasing	1	2	3	4	5	

46 Which organisation best describes your purchasing department?

Centralised	1	Decentralised	2	Combination of both	3
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In your enterprise which term would best describe the purchasing department's current role/responsibility/involvement in major corporate activities: 1 NONE; 3 MODERATE; 5 EXTENSIVE. In the last three columns labelled 1; 2 and 3 indicate what you expect to happen (1 Decrease; 2 Remain the same; 3 increase) over the next 5 years in respect of each role/ responsibility/ involvement.

47	Corporate strategic planning (Long term)	1	2	3	4	5	1	2	3	92
48	Corporate Mergers/Acquisitions/Alliances	1	2	3	4	5	1	2	3	93
49	Technology planning	1	2	3	4	5	1	2	3	94
50	Capital project investment planning	1	2	3	4	5	1	2	3	95
51	Capital project/Investment planning	1	2	3	4	5	1	2	3	96
52	Marketing planning	1	2	3	4	5	1	2	3	97
53	New product development	1	2	3	4	5	1	2	3	98
54	Information systems planning	1	2	3	4	5	1	2	3	99
55	Environmental planning	1	2	3	4	5	1	2	3	100
56	Financial Cash flow planning	1	2	3	4	5	1	2	3	101

57	Government relations	1	2	3	4	5	1	2	3	102
58	Outsourcing (Make or Buy)	1	2	3	4	5	1	2	3	103
59	International-countertrade -offset planning	1	2	3	4	5	1	2	3	104
60	Operations/production/ producibility	1	2	3	4	5	1	2	3	105
61	Service acquisition (travel; accommodation; car rental; advertising)	1	2	3	4	5	1	2	3	106
62	Economic forecasting	1	2	3	4	5	1	2	3	107

53

Do you engage in a partnering relationship with a supplier for a particular product or product class or do you intend engaging in such a relationship in the future. (Refer to the definition of partnering relationship)

YES	1
NO	2

If you answered **YES** for number 63 then rank the following main reasons (64 - 70) for your entering in to a partnering relationship. (1 being the most important) If you answered **NO** then indicate by ranking why the purchasing enterprise (yours in particular) and the supplier should engage in a partnering relationship for a particular product or product class.

NO	REASON	RANKING
64	Price of delivered item/product class	
65	Desire to influence/gain access to supplier's technology	
66	Desire to influence supplier's quality	
67	desire to improve delivery schedules	
68	reduce internal purchasing procedures and costs associated with ordering	
69	Secure reliable sources of supply	
70	Support Just-in-Time initiatives	

Rate how preferred each of the following sources of information are to your enterprise (1 very low preference; 4 average; 5 very high preference) in respect of a new purchasing product. (New Task Situation)

71	Personal salesman (visit by supplier)	1	2	3	4	5	
72	Technical Sources	1	2	3	4	5	
73	Personnel in your enterprise	1	2	3	4	5	
74	Purchasing agents in other enterprises	1	2	3	4	5	
75	Trade Associations	1	2	3	4	5	
76	Advertisement in trade journals	1	2	3	4	5	
77	Vendor files, trade registers	1	2	3	4	5	

Rate how preferred each of the following sources of information are to your enterprise (1 very low preference; 3 average; 5 very high preference) in respect of a modified purchasing product. (Modified-Rebuy Situation)

78	Personal salesman (visit by supplier)	1	2	3	4	5	
79	Technical Sources	1	2	3	4	5	
78	Personnel in your enterprise	1	2	3	4	5	
81	Purchasing agents in other enterprises	1	2	3	4	5	
82	Trade Associations	1	2	3	4	5	
83	Advertisement in trade journals	1	2	3	4	5	
84	Vendor files, trade registers	1	2	3	4	5	

Rate how preferred each of the following sources of information are to your enterprise (1 very low preference; 3 average; 5 very high preference) in respect of an existing purchasing product. (Straight Rebuy Situation)

LEAVE BLANK

85	Personal salesman (visit by supplier)	1	2	3	4	5	
86	Technical Sources	1	2	3	4	5	
87	Personnel in your enterprise	1	2	3	4	5	
88	Purchasing agents in other enterprises	1	2	3	4	5	
89	Trade Associations	1	2	3	4	5	
90	Advertisement in trade journals	1	2	3	4	5	
91	Vendor files, trade registers	1	2	3	4	5	

108 What position do you hold in the enterprise? (Interviewer - Whom did you interview?)

A Junior Purchasing Staff	1	A Senior Purchasing Staff	2	A member of staff that performs a buying function	3
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(Refer notes)

109 On a scale of 1 to 5, 1 being absolutely unethical and 5 being completely ethical, how would you rate your department?

--

110 On a scale of 1 to 5, 1 being absolutely unethical and 5 being completely ethical, how would you rate your major supplier's relationship with you?

--

111 Do you purchase raw materials or other products from a single supplier (refer definition of sole sourcing) despite there being more than one supplier?

YES	1
NO	2

112 What proportion of your total purchases (in terms of cost) constitutes purchases from a single supplier?

1 N/A	2 1% - 10%	3 11% - 20%	4 21% - 50%	5 more than 50%
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113 What is the best description of the purchases from the single supplier?

Not applicable	1
Low cost and low volume	2
High cost and high volume	3
Low cost and high volume	4
High cost and low volume	5

114 What do you consider the main reason for purchasing from a single supplier? (Select from 1 -5)

Pricing consideration	1
Reliability of supply	2
Close proximity of supplier	3
Cost consideration associated with service	4
Quality associated reasons - Standardisation	5

What do you consider the main reason for purchasing from multiple sources of supply?
(Select from 1 -5)

Pricing consideration (using one against the other)	1
Improving quality (using one against the other)	2
Close proximity of suppliers	3
Reasons associated with affirmative buying	4
Ensuring reliability of supply	5

Provide a list of 5 major suppliers

ANNEXURE B

BRIEF NOTES TO INTERVIEWERS (RESEARCH METHODOLOGY STUDENTS)

A series of lecture commencing on Monday 2 September 1996 will be devoted to the study: *strategic issues in purchasing management for manufacturing enterprises*. Attendance for the fifteen part-time students selected to administer the questionnaire is compulsory.

TOPICS TO BE ADDRESSED

1 OUTLINING THE PURPOSE OF THE QUESTIONNAIRE

Students are to read Chapter One of the study. A class discussion will be held on Monday 2 September 1996. Evaluate the questionnaire in the light of the purpose of the study as contained in Chapter One.

2 BASIC ETIQUETTE AND OBSERVING PROTOCOL

Punctuality. Make formal appointments and ensure that all appointments are kept. Be courteous and polite.

3 HOW TO USE A 5 POINT LIKERT SCALE?

By Monday 16 September 1996 read Chisnall M P (1986), *Marketing Research*. London: McGraw-Hill pages 157 - 168 starting with the section dealing with types of scales. Each question contained in the draft questionnaire will be discussed. Discuss the questionnaire with colleagues at work. This is also your learning experience.

4 WHOM DO YOU INTERVIEW?

Target the most senior person in the purchasing department. Should you have a problem look for someone actually doing the purchasing in the enterprise. If you unable to get any of these persons, get a person who previously has done purchasing

and now positioned elsewhere in the purchasing department. Pass the details concerning the study to personnel in the purchasing department.

5 DETERMINING THE SIZE OF THE ENTERPRISE

Read Professor Lemmer's article on the survey of the Zulu road market and Professor Potgieter's article on small and medium enterprises. Discuss the criteria, namely turnover and personnel employed, contained in both the articles with colleagues at work and see to what extent the size your enterprise corresponds with the criteria. Small enterprises - turnover less than R1 m with staff complement of 1 - 20; medium enterprise - turnover greater than R1 m but less than R10 million with a staff complement greater than 20 but less than 50; large enterprise - turnover greater than R10 m and a staff complement of more than 50. If in doubt, please discuss with me. Details concerning turnover are confidential. You may probe but be sensitive. Probe on how the respondents see the enterprise in terms of small, medium and large. Note your criteria.