CHAPTER 1

SCOPE OF THE STUDY

1.1 INTRODUCTION

The competitive landscape in most of the world’s economy is relentlessly changing. The accelerating rate of change can be attributed to technological advancements, globalisation, changing customer trends, more aggressive competition, shorter product life cycles and the volatile nature of the market. In today’s competitive business environment it is imperative for organisations to continually devise and implement strategies that are aimed at ensuring that they remain competitive, as well as building and maintaining a competitive advantage in the markets they serve (Smith, Goel & Gulhane, 2007:1).

The competitive and turbulent nature of the business environment warrants a change in the manner in which businesses are operated, in response to environmental changes. The change that is required in organisations goes beyond just changing the organisational culture and norms. Organisational culture and norms are systems of values and rules that govern actions and behaviour in organisations (Hill, 2009:89). In order to remain competitive, create and maintain a competitive advantage and keep abreast of market trends, organisations would benefit from changing their processes, technologies, structures, mindsets and departmental or functional responsibilities (Bagrain, Cunningham, Potgieter & Viedge, 2007:385).

Firms create and maintain a competitive advantage through product quality, value and service delivery – all of which are dependent on effective purchasing (Harland, Zheng, Johnsen & Lamming, 2004:2). Economic challenges such as the global oil shortage, material price fluctuations, interest rate fluctuations, the global recession and market uncertainty – all increase the need for proactive participation and support from the purchasing and supply function of an organisation. The purchasing and supply function
should play a fundamental role in implementing strategic continuous improvement initiatives. It should therefore be at the centre of cross-functional collaboration, as it is crucial that each functional strategy reflects and is in harmony with the corporate strategy to ensure success (Kalenga & Brent, 2005:45).

Over the past few years strategic purchasing and supply management have gained recognition as key success factors in the attainment of strategic objectives regarding revenues, costs and supply chain relationships (Coyle, Bardi & Langley, 2003:119). Strategic purchasing and supply can be described as a systematic and integrated approach to the management of all activities and procedures in the supply chain. These activities include the acquisition of resources such as raw materials, conversion of raw materials into finished goods as well as distribution of finished goods to customers (Kalenga & Brent, 2005:44).

Kalenga and Brent (2005:44) maintain that organisations should view the purchasing function as a tool that needs to be included as an integral part of the corporate strategy in order to achieve a competitive advantage. It is therefore imperative for organisations to focus on identifying the most efficient methods of purchasing and supply in order to ensure viability and sustainability in the attainment of their corporate objectives. As effectiveness and efficiency are crucial in modern purchasing and supply, adopting a strategic approach in line with globalisation is vital for ensuring competitiveness. The nature of operating in a global village calls for a more integrative approach to business operations, including purchasing and supply.

Although there is a growing focus on the purchasing and supply function, some organisations tend to regard direct purchasing as a more crucial aspect of purchasing. On the contrary, organisations would not be able to manufacture goods without the machinery, machine spares, energy, lubricants, gases and other consumables that are acquired by indirect purchasing. It is imperative for organisations to give attention to an aspect of purchasing that seems to receive little attention – indirect purchasing. Indirect purchasing refers to the acquisition of production-related goods and services, which
includes maintenance repairs and operating (MRO) supplies. These goods and services are important for production but do not form part of the finished product. Facilities management, security services, marketing, janitorial services and telecommunication services are all examples of indirect purchases (Van Weele, 2005:35). The present study investigates how the competitiveness of the indirect purchasing (IP) department of selected manufacturing firms in the Nelson Mandela Metropole can be improved.

1.2 PROBLEM STATEMENT

According to Kocabasoglu and Suresh (2005:6), managers tend to struggle to implement strategic purchasing in their organisations, due to obstacles that hinder efficiency and purchasing effectiveness. Since the global financial crisis of 2008, purchasing departments have been inundated with requests for price increases from suppliers. In some instances, suppliers invoice at the higher price without informing the buyers of such price increases. This results in price variances and accounts payable queries which in turn delay payment of vendor accounts. This therefore limits the buyers’ bargaining power, as these price increases are only discovered after the goods have been consumed and the organisation is compelled to pay. Furthermore, instead of focusing on strategic issues to improve the competitiveness of the core purchasing function, time is spent by buyers on transactional activities such as investigating variances, conducting price discussions with vendors and making necessary amendments to purchase orders.

There is therefore a need to investigate what purchasing and supply strategies can be employed by indirect purchasing divisions to increase their competitiveness through strategic purchasing and supply. A comprehensive literature review revealed that limited research has been done on the strategies for improving the efficiency and effectiveness of the purchasing and supply function through strategic purchasing particularly in indirect purchasing (Buddress, Smith & Raedals, 2006:1). Buddress et al. (2006:1) maintain that more attention has been given to direct purchasing than to indirect purchasing. In order to address this gap, this study will investigate how indirect purchasing can be leveraged as a strategic tool to increase competitiveness.
1.3 RESEARCH OBJECTIVES

1.3.1 Primary objective

The primary objective of this study is to improve the indirect purchasing competitiveness (IPC) of manufacturing firms in the Nelson Mandela Metropole by investigating how the effectiveness of their purchasing function can be increased through strategic purchasing. More specifically, the study investigates the relationship between effective strategic purchasing and supply (as measured by supplier relationship management, supply base reduction, customer relationship management, organisational communication, resistance to change and system efficiency) and indirect purchasing competitiveness of the selected firms.

1.3.2 Secondary research objectives

To achieve the primary objective, the following secondary research objectives are investigated:

- The nature and importance of strategic purchasing in the selected firms;
- the factors that influence the efficiency and effectiveness in a purchasing and supply environment;
- the strategies to enhance effectiveness and efficiency in order to increase competitiveness; and
- how purchasing departments should manage their relationships with suppliers and internal customers to enhance purchasing and supply efficiency.

1.3.3 Research design objectives

In order to achieve the above-mentioned primary and secondary research objectives, the following research design objectives are pursued:
- To conduct a secondary literature review in order to gain information on the variables under investigation;
- to construct a questionnaire for the collection of the primary data for the study;
- to conduct a pilot study in order to test the questionnaire;
- to make improvements to the questionnaire based on the findings of the pilot study;
- to conduct a mail survey of 50 to 60 purchasing and supply chain practitioners in manufacturing firms in the Nelson Mandela Metropolitan Municipality;
- to capture the data in an Excel computer software program;
- to analyse the data using the STATISTICA computer software program;
- to interpret findings and draw conclusions;
- to validate findings by convening focus groups to discuss the empirical findings, and
- to present recommendations to management.

1.4 METHODOLOGY

1.4.1 Research paradigm

A combination of the qualitative and quantitative research methodologies was used in this study. The qualitative method of research attempts to understand people’s perceptions in order to understand particular situations. This type of research method produces qualitative data. Qualitative research can be historical, sociological or political as well as educational (Leedy & Omrod, 2005:133).

The quantitative method is used to answer questions pertaining to relationships and to measure the correlation between variables, in order to explain, control and predict phenomena. It seeks the facts or the causes of phenomena and focuses on and produces quantitative data (Leedy & Omrod, 2005:94). In seeking to improve effectiveness, a quantitative analysis will provide insight into the relationships that exist between all the different variables. To understand the operations in the indirect purchasing departments in the selected firms and to interpret the impact of various activities, including
stakeholder interaction, the qualitative approach is used. The study therefore uses both quantitative and qualitative research methodologies.

1.4.2 The sample

Convenience sampling was used to select 50 out of a possible 60 purchasing and supply chain practitioners in the manufacturing industry in the Nelson Mandela Metropole. Anonymity and confidentiality were guaranteed. The sampling design and the final sample used in the study are discussed in detail in Chapter 4.

1.4.3 The measuring instruments

Self-constructed measuring instruments based on secondary literature sources were used to measure the variables listed below:

- Supplier relationship management (SRM);
- Supply base reduction (SBR);
- Customer relationship management (CRM);
- Organisational communication (COM);
- Resistance to change (RTC);
- System efficiency (SYS); and
- Indirect purchasing competitiveness (IPC).

The instruments were anchored to 5-point scales ranging from (1) strongly disagree to (5) strongly agree. The instruments are discussed in detail in Chapter 4.

1.5 HYPOTHESES

The following null hypotheses were formulated to achieve the research objectives:

\[ H_{01} = \text{Supplier relationship management exerts no influence on indirect purchasing competitiveness.} \]
Ho$_2$ = Supply base reduction exerts no influence on indirect purchasing competitiveness.
Ho$_3$ = Customer relationship management exerts no influence on indirect purchasing competitiveness.
Ho$_4$ = Organisational communication exerts no influence on indirect purchasing competitiveness.
Ho$_5$ = Systems efficiency exerts no influence on indirect purchasing competitiveness.
Ho$_6$ = Resistance to change exerts no influence on indirect purchasing competitiveness.

The above-mentioned null hypotheses are graphically depicted in Figure 1.1.

**FIGURE 1.1: THE MODEL TO IMPROVE INDIRECT PURCHASING COMPETITIVENESS – THE NULL HYPOTHESES**
1.6 DEFINITIONS OF KEY CONCEPTS

1.6.1 Strategic purchasing

Strategic purchasing refers to an approach to purchasing whereby buyers forge mutually beneficial and long-lasting relationships with members of the supply chain. With strategic purchasing, businesses view their suppliers as partners instead of as commodity providers. This is of great importance to manufacturing firms, as a great portion of their revenue is channelled towards purchasing raw materials and other goods and services that are required in the manufacturing process (Thawiwinyu & Laptaned, 2009:8).

In the present study, strategic purchasing is defined as the combined effectiveness of the selected firms’ supplier relationship management, supply base reduction, customer relationship management, organisational communication, resistance to change and system efficiency in their indirect purchasing departments.

1.6.2 Indirect purchasing

Indirect purchasing is the purchase of any materials that are not directly applicable to the goods produced. These materials include consumables, such as paper, pens, machinery, machine spares, items used in manufacture, but not part of the finished product, personnel costs and other related costs (Buddress et al., 2006:3).

1.6.3 Direct purchasing

Direct materials purchasing is the purchase of materials required to produce end products. The nature of direct purchasing is that the purchased material ends up as part of the finished product. For example, rubber, various compounds, liners and films are all raw materials which when combined form part of a tyre (Van Weele, 2005:19).
1.6.4 Supply chain

A supply chain can be defined as a system of organisations, people, technology, activities, information and resources involved in moving products or services from suppliers to customers. It includes all suppliers, customers and intermediaries (Coyle et al., 2003:689).

1.6.5 Supply chain management

Supply chain management is the management of a network of interconnected businesses that are involved in providing goods and services that are required by customers. It includes all movement from the raw material phase to the finished goods phase (Coyle et al., 2003:689).

1.6.6 Supplier relationship management

Supplier relationship management allows for the development and maintenance of strategic relationships with key suppliers and permits enterprises to adopt a new way of thinking about the supply chain. It also promotes supply chain transparency. Instead of pursuing short-term advantages in each transaction, suppliers and their customer organisations seek to work together in close collaboration for long-term mutual advantages. In the context of the study, supplier relationship management is defined as the effective management of relationships that exist between buying and selling organisations and how such relationships are leveraged to yield mutual benefits (Van Zyl, 2005:55; and Moeller, Fassnacht, & Klose, 2006:73).

1.6.7 Supply base reduction

A critical objective of most organisations is to focus on supply base reduction, which is a tool used to better manage the supply base. The supply base reduction objective is closely linked to supplier relationship management. Supply base reduction is one of the key
strategic areas of responsibility in the purchasing and supply function, since an incompetent supply network can be damaging to an organisation. It entails reducing the number of suppliers, and entering into and maintaining long-term agreements with the chosen few (Thawiwinyu & Laptaned, 2009:11).

1.6.8 Customer relationship management

Customer relationship management impacts on performance and efficiency. Such relationships include relations with stakeholders or user areas, such as engineering, maintenance and production. It focuses on implementing strategies to better serve customers and meet their demands (Schuster & Dufek, 2004:122). The present study focuses customer relationship management on the interaction and relationship that exists between an organisation’s purchasing department and the other departments that it serves.

1.6.9 Organisational communication

Communication is the process through which information is exchanged between two or more people in an organisation, where meaning is created with the purpose of influencing behaviour or relaying a message. For the purpose of the present study, organisational communication is therefore defined as the exchange of information between the buying organisation and the selling organisation (cross-organisational), as well as the exchange of information between individuals from different departments of the same organisation. It also includes the exchange of information between individuals from the same department in the same organisation (Bagraim, Cunningham, Potgieter & Viedge, 2007:162).

1.6.10 Resistance to change

Resistance to change occurs when people either openly or secretly fail to support a change that happens or is introduced in an organisation. Individual resistance factors include the fear of the unknown, uncertainty about job or economic stability, failure to
understand the need for change, social disruptions and selective perceptions (Swanepoel, Erasmus, Van Wyk & Schenk, 2003:737).

1.6.11 Systems efficiency

Systems efficiency is the ability of an organisation’s systems, in terms of operations and technology, to adequately satisfy customer needs. There increasingly is a need to coordinate purchasing with other functional areas and suppliers to ensure product, process and quality success. The study defines systems efficiency in relation to the efficiency of the information systems that are used to enable and support the coordination of purchasing with other stakeholders, including suppliers (Hemsworth, Sánchez-Rodríguez, & Bidgood, 2008:1).

1.6.12 Indirect purchasing competitiveness

Competitiveness is the ability of an organisation to provide products and services in the same manner as or more effectively and efficiently than the relevant competitors. It entails meeting local and international quality standards at prices at competitive prices and the provision of maximum returns on all invested resources (Porter, 2005:1). Indirect purchasing competitiveness in the context of the present study is defined as optimising purchasing efficiency by focusing on effectively managing the total cost of acquiring, moving, holding, converting and supporting products and services throughout the supply chain (Alvarez, Compos & Lasar 2010:2).

1.7 OUTLINE OF THE STUDY

The study is divided into six chapters. Chapter 1 outlines the scope of the study, problem statement, research objectives, the research methodology and the measuring instruments.

Chapter 2 comprises a literature review on strategic purchasing and supply, determining factors that influence efficiency and outlining the methods of improving effectiveness
and efficiency. It provides a brief outline of strategies that can be employed to enhance effectiveness and efficiency in order to increase competitiveness. Furthermore, it provides an explanation of the benefits that can be yielded by organisations that focus on supplier relationship management (SRM), CRM and supply base reduction as tools for meeting the firm’s strategic objectives.

The hypothesised model to improve the competitiveness of indirect purchasing departments is discussed in Chapter 3.

An outline of the research methodology used for the investigation is provided in Chapter 4. This includes the research paradigm, sampling design or method and the measuring instruments. This chapter also discusses the results of the validity and reliability assessments of the instruments that were used in the study.

An interpretation, as well as a summary of the empirical results of the study and the implications thereof will be discussed in Chapter 5.

The researcher’s conclusions and recommendations forthcoming from the study will be discussed in Chapter 6.
CHAPTER 2

LITERATURE REVIEW ON STRATEGIC PURCHASING

2.1 INTRODUCTION

Every department within an organisation relies on the purchasing function in one way or another. Purchasing as a business function performs activities which range from being of an operational and transactional nature to a more strategic one. In supply chain circles, sourcing, procurement and purchasing and supply are words that are used interchangeably – all of which refer to the process of acquiring goods and services. Regardless of terminology, the importance of the purchasing function can never be overstated as studies reveal that in most manufacturing firms, purchased materials account for over 60% of the cost of finished goods (Mangan, Lalwani & Butcher, 2008:76).

In the past, most organisations treated purchasing as a routine clerical function or as a service function. Organisations did not see the need to incorporate the purchasing strategy in the overall corporate strategy, until they realised its value-adding potential. The paradigm shift that has taken place in the purchasing function has transformed the function from being just transactional, with its focus on order placement, expediting and following up on purchase orders. The purchasing function has acquired a more strategic role which focuses on long-term, value-adding purchasing and supply chain activities (Burt, Dobler & Starling, 2003:26).

This chapter discusses the nature of purchasing, outlining its interface with other functional areas. The objectives and categories of purchasing are also outlined. Paradigm shifts in the purchasing function and their impact are discussed. These shifts include automation, globalisation, communication, information technology, and the transition to supply management. The role and importance of supply management is discussed, focusing on how it impacts on the value chain and how purchasing can be leveraged in
the value chain. An overview of the purchasing process and strategies for optimising indirect purchasing are also discussed.

2.2 THE NATURE OF PURCHASING

Common organisational misconceptions about purchasing are that purchasing is about placing orders and not about “managing a key function” in the business. It is often misunderstood as a “necessary chore” that can be handled by anyone (Rice consulting associates, 2009). On the contrary, purchasing is a key strategic function, which involves the acquisition of goods and services. These goods and services include raw materials, capital equipment and maintenance and operating (MRO) supplies that are required to fulfil an organisation’s objectives at the most favourable conditions (Wisner, Tan & Keong Leong, 2009:39).

Wisner et al. (2009:39) refer to individuals who perform purchasing activities as buyers and categorise them as merchants and industrial buyers. Merchants include retailers and wholesalers who purchase merchandise in high volumes for resale purposes. Industrial buyers purchase raw materials and other production requirements for manufacturing or conversion purposes (Wisner et al., 2009:39).

2.2.1 The objectives of purchasing

The main responsibility of purchasing is to obtain materials and parts that are required to manufacture products or render services. Its goal is to develop and implement purchasing plans for products and services that support operational strategies (Stevenson, 2002:528). According to Stevenson (2002:529), purchasing is a management function which forms an interface with an organisation’s functional areas and its suppliers. Stevenson (2002:529) illustrates the purchasing interface in Figure 2.1, with the operations unit being the main source of material requests for production. Cooperation between purchasing and the organisation’s operations unit is vital to ensure that production targets are met.
The interface between purchasing and the organisation’s legal department ensures that pricing and legal terms are clearly understood by purchasing when negotiating contracts. The accounting department pays suppliers for products and services, records inventory, checks invoices and assists in monitoring vendor performance. The design and engineering department prepares material specifications and communicates such specifications to purchasing and purchasing ensures that all suppliers adhere to the specified requirements. Receiving checks incoming shipments for specified quality and quantity adherence. Suppliers work closely with purchasing to establish the organisation’s material requirements and determine how to effectively meet them.

**FIGURE 2.1: PURCHASING INTERFACES**

Source: Stevenson (2002:529)

The general objectives of purchasing have traditionally been expressed as the five ‘rights’ of purchasing and entail acquiring goods and services:
At the right price

Cost saving has always been on top of purchasing personnel’s priority list, as it is used as a measure of performance in most organisations. The emphasis on cost saving is driven by the significant contribution of purchasing to the cost of goods sold. The objective is to minimise the overall acquisition costs in a highly efficient manner, as the purchase of company requirements at the most competitive prices provides cost benefits. Such cost benefits can be achieved by pursuing economies of scale discounts, eliminating non-value adding activities and transmitting information effectively throughout the supply chain (Jacobs & Chase, 2008:187).

Dobler and Burt (1996:42) maintain that buying at the right price goes beyond just paying the lowest price but includes buying competitively. Buying competitively involves keeping abreast of the market, with respect to the impact of demand and supply forces on prices and material availability in the marketplace. It entails focusing on more than just the final price but also analysing and understanding the suppliers’ cost structures. It further includes implementing initiatives that will yield win-win situations which assist suppliers in improving their cost structures while providing cost benefits to the buying organisation.

Of the right quality

Buying the right quality of products and services has a significant impact on the organisation’s end product. Poor quality raw materials are equal to poor quality end products. Furthermore, poor components or services delay finished goods delivery, increase costs and can affect company goodwill (Slack, Chambers, Harland, Harrison & Johnston, 1998:479).

In the right quantity

Acquiring goods and services in the right quantity entails keeping inventory investment and inventory losses to a minimum. Purchasing in the right quantity can impact on the
operation’s performance with regard to delivery, speed and reliability (Slack et al., 1998:279). As much as buying at the right price entails reaping economies of scale benefits by buying in bigger quantities, the disadvantage is that it can increase inventory costs. Therefore, purchasing has to strike a balance between inventory levels that are required to operate an organisation and inventory carrying costs (Dobler & Burt, 1996:43).

At the right time

Purchasing at the right time also impacts on speed of delivery, reliability and dependability. Purchasing must therefore give careful consideration to the types of purchases that are handled as well as the supplier location especially when dealing with imported items. Delayed ordering of imported materials is tantamount to delayed time to market. According to Dobler and Burt (1996:42), purchasing at the right time should be coupled with buying wisely. This entails continually searching for value adding elements which yield a combination of service, quality and cost benefits.

From the right supplier or source

An oversight on the part of traditional purchasing was to assume that purchasing from the right source was simply about price, quality and delivery. Purchasing from the right source involves ensuring continuity of supply by supporting operations with a continuous flow of materials and services. It also involves the development of effective and reliable sources of supply.

Dobler and Burt (1996:43) suggest that cooperative suppliers who are willing to assist buyers in achieving their savings objectives and mitigate price increases and market effects are an invaluable resource. Developing relationships with suppliers and establishing integrated relationships with other departments are therefore purchasing objectives that should be continuously pursued in firms.
2.2.2 Purchasing categories

The purchasing function is usually performed most effectively and efficiently by a unit made up of buying specialists, who collaborate with stakeholders to form a cross-functional team of specialists. The tasks, responsibilities and actual purchasing involvement in strategic purchasing decision-making vary between organisations, due to product complexity and market uncertainty (Van Weele, 2005:37). Organisations are often faced with the decision on how to structure their purchasing departments. The following are common categories which organisations use to structure and govern their purchasing operations:

2.2.2.1 Centralised purchasing

Centralised purchasing refers to a purchasing structure where all purchasing activities for the entire organisation are coordinated and executed from a single location, which is usually the organisation’s head office. Such purchasing activities include decision-making, determination of order quantities, pricing policies, supplier selection, negotiation, and contracting (Wisner et al., 2009:62).

Centralised purchasing allows for crucial long-term contracts to be negotiated centrally and consolidates organisation-wide purchasing requirements. The consolidation of purchasing requirements enhances the organisation’s bargaining power and yields great profits through economies of scale benefits (Assiamah, 2008:20). Hill (2009:186) defines economies of scale benefits as unit cost reductions associated with large scale outputs, whereby fixed costs are spread over a large volume. The consolidation of purchasing requirements therefore leads to quantity discounts, more favourable purchase terms and reduced shipping costs (Wisner et al., 2009:62). The prospect of gaining more business serves as an incentive for suppliers to offer customers better terms, services and technological expertise. Furthermore, centralisation minimises the number of people that suppliers deal with in an organisation (Benton, 2007:12).
Centralisation prevents duplication of job functions, reduces labour costs, presents an opportunity to standardise some products or brands and allows for better budgetary control (Assiamah, 2008:20). According to Wisner et al. (2009:62), centralisation affords buyers the opportunity to specialise in specific product categories, instead of handling all product categories or material groups. For example, one buyer can specialise in facilities management, another in chemicals and another in capital equipment. Furthermore, it also eliminates competition between the organisation’s business units (Assiamah, 2008:20; Wisner et al., 2009:62).

Organisations which have decentralised profit centres tend to view centralised purchasing as a hindrance to organisational efficiency as it makes cross-functional interaction difficult (Benton, 2007:13). For example, product conceptualisation and design stages require high levels of engineering involvement in purchasing decision-making. In cases where the purchasing and engineering departments are at different locations, centralisation makes the necessary frequent interaction between purchasing and engineering difficult and lends itself to misunderstanding and failure (Benton, 2007:13).

Some organisations prefer to be located close to their suppliers and enter into just-in-time (JIT) agreements with them. The nature of JIT agreements is that the supplier delivers materials just in time for utilisation in the buying company’s manufacturing process (Stevenson, 2002:713). According to Burt et al. (2003:335) and Benton (2007:109), JIT agreements yield cost benefits such as reduced inventory levels, improved lead-time reliability, scheduling flexibility, improved customer satisfaction and material costs. However, the downside of centralisation is that it renders such agreements cost-ineffective, as distance problems could hinder the co-ordination of such agreements (Benton, 2007:13).

2.2.2.2 Decentralised purchasing

A decentralised purchasing structure involves the existence of multiple purchasing departments within an organisation with all purchases being managed by individual
business units. Decentralised purchasing is characterised by a lack of centralised coordination or development of policies and each unit performs its own activities (Van Weele, 2005:234). As much as decentralisation eliminates the proximity problem that was mentioned in the previous section, it limits the benefits leveraged by purchasing in the form of quantity discounts, group negotiation synergies, and buying power afforded by centralisation. This therefore means that an organisation could have different agreements with the same supplier as more buyers negotiated for their respective business unit (Blomberg, 2006:11).

2.2.2.3 Centralised-decentralised (hybrid) purchasing

Some organisations are characterised by purchasing structures which are neither centralised nor decentralised, but are something in-between. Such structures are referred to as hybrid structures (Wisner et al., 2009: 62). In an organisation that has a hybrid or a centralised-decentralised structure, a corporate purchasing department exists, whereby purchasing procedures and policies are formulated at a corporate level. However, tactical and strategic purchasing activities are undertaken by individual business units. Hybrid purchasing structures allow organisations opportunities to capture the benefits of centralisation and decentralisation, while ideally mitigating the disadvantages (Van Weele, 2005:235).

2.2.2.4 Direct purchasing

Most organisations tend to split their purchasing and supply departments into manufacturing purchasing and non-manufacturing purchasing or direct and indirect purchasing. Direct purchasing involves the purchase of direct material requirements, which are used in the production processes of manufacturing organisations (Van Weele, 2005:70). In the past, when analysing expense reports and budgets, organisations focused on direct material costs – actual units of production, which constitute direct material and direct labour costs, as they account for the major part of the expenditure (Benton, 2007:238).
Organisations rely on enterprise resource planning (ERP) and materials requirements planning (MRP) systems to plan for purchases. An ERP system is a business software system which automates and integrates an organisation’s functions, allowing them to share common data and access real-time information. It provides a means to plan, analyse and monitor demand and supply and allocate resources (Coyle et al., 2003:676). An MRP system is a software application which analyses the internal condition of an organisation and provides reports on production and purchasing requirements for a given period. The purpose of an MRP system is to ensure material, components and product availability for planned production. In addition, an MRP system seeks to maintain the most economic inventory levels and plans production activities, delivery schedules and purchasing activities (Madapusi, 2008:526).

In essence, the purpose of direct purchasing is to ensure continuity of raw material supply to support production. Direct purchasing requirements are directly linked to production and are clearly specified by means of a bill of materials. A bill of materials (BOM) specifies which assemblies, subassemblies, parts and raw materials are required to manufacture units of finished products. For example, a car manufacturer’s BOM will clearly outline the list and quantities of all the components such as tyres, doors, axles that are required for the production of each car (Stevenson, 2002:643).

2.2.2.5 Indirect purchasing

Indirect purchasing constitutes the purchase of products and services that are related to production but do not necessarily form part of the finished product. Indirect purchases include the purchase of maintenance repairs and operations (MRO) requirements, capital equipment, machine spares and production-related consumables (Caridi, Cavalieri, Diauzzi & Pirovano, 2004:649). Other indirect purchasing category expenditure items are office furniture, office consumables, professional services, IT hardware and software, travel, sales and marketing and training services (Caridi et al., 2004:649).
Indirect purchasing transactions are characterised by a lot of low value requirements, a more complex stakeholder environment and a variety of suppliers. The stakeholder environment is complex, in that it involves a variety of departments with unique requirements. Indirect purchasing requirements do not have a bill of materials and each purchase has its unique nature. The requirements of the marketing department differ significantly from those of the finance and maintenance departments, which warrants that indirect purchases be handled in an efficient and strategic manner (Buddress, Smith & Raedels, 2006:1).

According to Rycraft and Van den Bosch (2010:1), indirect purchasing expenditure accounts for over 60% of non-manufacturing organisations’ expenditure on third-parties. In the financial services sector, it accounts for more than 90% and over 50% in manufacturing organisations. Murugan and Narasimhan (2009:1) suggest that, since indirect purchasing transactions account for the bulk of the total transactions made in organisations, organisations need to adopt strategic approaches to effectively manage this expenditure. For firms to remain competitive and to leverage their expenditure there needs to be a balance of disciplined processes, technology and leveraging of cross-functional expertise and diverse expertise of a range of suppliers (Strafford, 2009:3).

*Indirect purchasing challenges*

The process of acquiring indirect purchasing requirements unambiguously differs from direct requirement acquisition. According to Tuteja (2004:2), direct purchases are easier to handle than indirect, as big corporations such as General Motors, tend to negotiate agreements with suppliers with specific volume commitments prior to embarking on new vehicle programmes.

Murugan and Narasimhan (2009:2) and Tuteja (2004:2) suggest that the nature of indirect purchases makes it difficult for purchasing professionals to adequately plan for them and they end up dealing with the following complexities and challenges:
- Lack of indirect purchasing spend visibility renders it difficult for buyers to extract or quantify the exact indirect purchasing expenditure. The lack of visibility can be attributed to most quotations being based on one time buys, with no repeat purchase commitment.
- Lack of the resources and clear strategy to source indirect requirements effectively.
- Indirect purchases tend to be decentralised, which infringes upon volume discount opportunity.
- Most of the requirements tend to be low value requirements and once-off requirements, which limits the bargaining power of purchasing personnel. As cost saving has traditionally been one of the measures of purchasing personnel performance, the low-value nature of indirect purchases makes the attainment of cost savings difficult.
- One of the characteristics of indirect purchasing is a large number of suppliers. Buyers tend to experience difficulty in managing large numbers of suppliers in the absence of adequate breadth of internal category management expertise.
- Organisations have different indirect purchasing systems, processes and interfaces.

2.2.3 Purchasing evolution: paradigm shifts in purchasing

Previous studies reveal that senior executives historically channelled organisational resources towards marketing, finance and operations as well as research and development, while purchasing received little or no attention (Burt et al., 2003:25). Burt et al.(2003:25) suggest that, in the past purchasing did not have suitably qualified personnel who could lead the function in a way that optimised value and contributed to business success. This therefore resulted in purchasing being regarded as a clerical function with purchasing existing solely for the purpose of transaction processing. Over the decades the purchasing function underwent and was transformed by important paradigm shifts:
2.2.3.1 Automation

The 1960-1970 decade was one where transactions for materials that were required for manufacturing and other office requirements were manually done by means of a Kardex system. During that period purchasing focused on the transactional elements of the procurement process and was accepted as a support function that provided for the other departments’ sourcing needs. Purchasing personnel merely focused on purchase price and production line shutdown prevention. The purchasing function was administrative and not strategic (Thawiwinyu & Laptaned, 2009:8).

The technological revolution of the late 1970s and 1980s introduced the world to advanced communication, information processing and transportation technology. Organisations started to manage inventories electronically. Technological advancements brought on by materials requirement planning (MRP), enterprise resource planning (ERP) and Just-In-Time (JIT) inventory management systems, increased purchasing efficiency and streamlined its activities (Madapusi, 2008:525).

Technological advancements also led to the automation of some business processes, which encouraged specialisation and reduced the unit costs of production. New technologies therefore created opportunities for substitutability, different forms of competition and contributed to creating superior value for customers. These changes strengthened the manufacturing-purchasing interface and created a need to align the purchasing cycle with production requirements. Furthermore, purchasing was enabled to assume a more proactive role in organisations by being involved in product design and development activities (Thompson, 2005:241).

2.2.3.2 Globalisation

Globalisation of markets, which Hill (2009:6) refers to as the merging of historically distinct and separate national markets into one global market place, also contributed to changes in purchasing. The major driver of globalisation was the deregulation of trade...
barriers in a form of high tariffs on imports of manufactured goods. The aim of the trade barriers was to protect domestic competition. According to Hill (2009:11), the deregulation thus encouraged international trade, which is the exporting of goods and services to customers in other countries. The emergence of new markets has broadened the competitive landscape as organisations were no longer just concerned about staying ahead of local competitors but had to contend with global competitors. Globalisation also enabled organisations to purchase materials from low cost countries, which makes their product prices more competitive and led to more effective supply chains (Hill, 2009:11).

According to Cook (2009:135), globalisation led to the establishment of dedicated kaizen teams in organisations. Kaizen teams are continuous improvement teams which focus on identifying ways in which the firm can improve in every process in order to be more competitive. The focus on continuous improvement fosters a culture of quality, which impacts directly on competitiveness and organisational success (Burt et al., 2003:125).

In order to remain competitive and gain competitive advantage, organisations had to align themselves with global counterparts by implementing word-class standards in their processes. The effect has been true of the purchasing function, whereby the emergence of foreign direct investments (FDI) has resulted in some purchasing personnel transitioning from being local buyers to regional buyers in the case of multinational companies. Therefore, the skills demanded of purchasing personnel and other business functions changed and business success depended greatly on knowledge workers (Thompson, 2005: 241).

2.2.3.3 Communication and information technology

The emergence of the internet and the World Wide Web (WWW) created a global electronic marketplace and enhanced communication. Nowadays an enormous amount of information exists in various websites where buyers have more information at their disposal than ever before. This information availability creates an opportunity for better strategic decisions to be made. The WWW has become the information backbone of the
global economy, as it allows businesses to expand their global presence at a low cost and removes time and location constraints (Hill, 2009:14).

Web-based information systems enable several purchasing related activities to be managed electronically, which enhances efficiency. Products can be marketed, viewed and purchased online. In many instances, electronic transfer (EFT) of funds has replaced cheque payments for large corporations, resulting in reduced transaction costs. Business-to-business (B2B) marketplaces and reverse auctions integrate supply chain members (Caridi et al., 2004:649).

Transportation technology in the form of commercial aircraft reduces distance in terms of time between locations. In addition, containerisation simplifies transhipment from one mode of transport to the next at a significantly low cost, which is a far cry from the labour intensive manner in which it was done in the past. Low-cost transportation has made shipping of products around the world more economically viable (Hill, 2009:14).

2.2.3.4 Transition to supply management

Purchasing management as a discipline or business function has changed extensively and has over the years been viewed with a greater level of interest in most organisations due to being recognised as a key success factor in the attainment of strategic objectives (Kalenga & Brent, 2005:44). According to Kalenga and Brent (2005:44), the increased interest in purchasing can be attributed to the fact that organisations have come to realise that the purchasing function has an impact on their competitive position, as it controls a significant portion of corporate expenditure.

Purchasing and supply managers are increasingly realising that their competitiveness depends on resource optimisation. The purchasing function has therefore been reengineered from its traditional and transactional division to a team of material coordinators and supply managers or specialists. Material coordinators now place orders against purchasing agreements and minimise inventories. Supply managers or specialists
participate in new product development, select supply sources, manage costs, develop, nurture supplier relationships and manage long-term agreements with suppliers (Burt et al., 2003:26).

2.2.3.5 Purchasing trends and future projections

Cross-functional cohesion

The purchasing function is one of the most value-adding functions in organisations, as it forms a strategic connection between the organisation’s functional areas and suppliers. The purchasing interface promotes cross-functional cohesion, where an organisation’s functional areas learn about how various functional strategies are interlinked as part of the overall corporate strategy. The trend towards cross-functional team-work will enhance competitiveness and growth in the face of market turbulence and an increasingly competitive market place (Benton, 2007:33).

Adoption of the value concept

In the past couple of years, organisations have been adopting the value concept, with purchasing assuming a strategic role in organisations instead of focusing on the traditional cost-saving objective. The value concept entails taking strides in enhancing and increasing product value, while eliminating non-value adding activities and costs (Telgen & Pop–Sitar, 2001:803). Furthermore, organisations are adopting the principles of lean production and six-sigma in order to sustain and improve competitiveness. Wisner et al. (2009:279) define six-sigma as an enterprise-wide philosophy which strives to achieve excellence in the production of products and services. The value concept, lean production and six-sigma implementation will enhance value and promote excellence throughout the supply chains.
Centralisation of high value purchases

According to Benton (2007:13), the future outlook for most organisations’ purchasing structure is that some major purchases will be handled in a centralised manner, as electronic commerce (e-commerce) and electronic purchasing (e-purchasing) eliminate the distance challenge that was posed by centralised purchasing in the past. E-commerce and e-purchasing are seen as strategic tools that will enhance the purchasing environment well into the future.

As organisations streamline their processes and become lean, they will be able to realise the benefits of centralised purchasing through bundled or aggregated agreements. Bundled agreements are realised when the purchase of similar requirements for different business units is undertaken by one individual from one business unit, who negotiates quantity discounts on behalf of all the business units. Some multinational organisations such as General Motors and Honda America are already reaping the benefits of centralised purchasing for major expenditures (Benton, 2007:13). For example, General Motors could negotiate an agreement for stationery purchases with a national stationery supplier from the business unit in Port Elizabeth and yield quantity discounts for all the business units in South Africa.

Relationship focus

Benton (2007:13) maintains that in future even greater attention will be given to the purchasing function, with key suppliers and stakeholders being involved in strategy development. Great focus will also be on relationship building as a strategy to develop and maintain a competitive advantage.

Green purchasing

Preuss (2001:346) regards purchasing as an organisation’s gate-keeper which can influence the quality of the materials that enter it, with regard to the technical and
environmental aspects. The growing awareness about global warming and the increase in environmental awareness campaigns have brought about a new purchasing buzz word or phenomenon – green purchasing. Green purchasing, also known as sustainable purchasing, entails looking at what products are made of, where they have come from, who manufactured them and how such products will be ultimately disposed of (Robinson & Strandberg, 2008:8).

Easton, Reeve, Strandberg and Associates (2005:2) define green purchasing as the selection of goods and services which promote a healthier community and environment by considering the costs and the environmental and social impacts of products and services through all stages of their lifecycle. It embodies environmental, social and ethical dimensions and brings benefits to the environment, local and global communities. With respect to environmental preservation, the future outlook of purchasing is that buyers will move towards selecting only those suppliers who have green initiatives in place. The most popular initiatives are energy conservation, recycling and gas emission reduction (Wisner et al., 2009:113).

2.3 THE ROLE AND IMPORTANCE OF PURCHASING

The pivotal role of the purchasing function is to efficiently manage an organisation’s external resources in a manner that ensures that the supply of all goods, services and capabilities that are required for operating the organisation are acquired at a favourable cost and required quality standards (Van Weele, 2005:12). The role and importance of purchasing are reflected in its focus, its role in the value chain and how it leverages the value chain.

2.3.1 Purchasing focus

Burt et al. (2003:28) suggest that the ultimate focus of most world-class organisations’ purchasing and supply functions is on the following value-adding outputs, which are a function of proactive purchasing:
- **Quality**: The quality of raw materials that are acquired for production should be defect free to ensure that the quality of the finished product reflects standards which contribute to gaining a competitive advantage for the manufacturing organisation. Purchasing thus ensures that good quality products are acquired in a cost efficient manner.

- **Cost**: The purchasing and supply management function strategically manages costs, not just by acquiring goods from the cheapest source, but by managing the total cost of ownership (TCO). By managing TCO, purchasing personnel strategically manage the total cost of acquiring, moving, holding, converting and supporting products and services throughout the supply chain.

- **Time**: It is imperative for the purchasing and supply function, in conjunction with its suppliers, to play an active role in reducing the time required for bringing new products to the market. World-class and high performance organisations should aim to be ahead of competitors, to meet and even to exceed customer expectations.

- **Technology**: Purchasing and supply should keep abreast of market trends with respect to technology and ensure that appropriate technology is made available by the supply base in a timely manner and that it is adequately controlled.

- **Continuity of supply**: It is the role of purchasing to ensure continuity of supply by carefully monitoring trends in the supply market, to determine the impact of such trends on the organisation’s operations and mitigate any negative effects through supplier relationship management.

Cost effective purchasing activities aim at realising the lowest acquisition costs by ensuring the availability of the best purchase price and minimising stockholding and administration costs. The scope of the purchasing function is much broader than the purchasing department as it encompasses managing every aspect of business whereby goods and services are acquired from third parties. Purchasing decisions therefore impact on organisational value (Telgen & Pop-Sitar, 2001:803).
The role of the purchasing function therefore encompasses all activities that are aimed at determining the scope of supply (SOS). It also links suppliers to their customers by ensuring that competent suppliers who are able to meet the organisation’s needs in a cost effective manner and within a specific lead time are selected to effectively fulfil that scope (Telgen & Sitar or Pop-Sitar, 2001:806).

The role of purchasing also includes managing relationships with suppliers and internal stakeholders to ensure that the organisation remains competitive. Purchasing ensures that relationships with internal stakeholders or customers are developed and nurtured through cross-functional relationships that are aimed at creating the kind of cohesion that enhances productivity and competitiveness. Furthermore, mutually beneficial relationships with suppliers are developed and maintained (Thawiwinyu & Laptaned, 2009:10).

2.3.2 The role of purchasing in the value chain

While the pivotal role of purchasing is to ensure that goods, services and capabilities which are required for meeting the organisation’s objectives are acquired favourably, it contributes to the strategic success of the organisation through its role in the value chain. Naude (2009, 62) describes the value chain as a series of organisations which perform a series of value-adding activities to convert inputs into outputs which are esteemed by customers. An organisation’s value chain distinguishes all the major activities which create value for the customers as well as related support activities.

In essence, the value chain represents all the activities and functions that are involved in converting a product from its raw material state to a state that is deemed valuable to the customer for consumption. Firms can gain and maintain a competitive advantage by effectively managing the activities within the value chain and leveraging the interrelatedness of these activities to their advantage.
Porter’s value chain, illustrated in Figure 2.2, suggests that a competitive advantage is created and sustained when an organisation’s most critical activities are performed cheaper or better than those of its competitors. In order to fully understand the competitive advantage of an organisation, the organisation must first be viewed with respect to its interrelated activities. The manner in which the activities are performed and managed contributes to the organisation’s cost structure (Thompson, 2001:343).

**FIGURE 2.2: PORTER’S VALUE CHAIN**

Source: Thompson (2001:343)

**Primary activities**

Van Weele (2005:9) and Thompson (2001:343) agree that Porter’s value chain consists of the following five primary activities:

- *Inbound Logistics*: Activities relating to receiving, sorting and warehousing of production inputs such as raw materials, their distribution to manufacturing as they are required and any returns to suppliers.
- **Operations**: Activities related to the processes of transforming inputs into finished products and services. They include tooling, machining, assembly, equipment maintenance, testing and packaging.

- **Outbound logistics**: Activities associated with the warehousing and distribution of finished goods.

- **Marketing and sales**: Activities related to customer needs’ identification and sales generation. Such activities include advertising, promotion and distribution channel selection.

- **Service** relates to the support of customers after the products and services are sold to them.

**Support activities**

Primary activities are supported by the following support services:

- **Procurement**, which relates to purchasing inputs such as materials, supplies, equipment and other consumables. Procurement is a support activity in that its purchased inputs can be related to primary activities such as raw materials for production. On the other hand, they could be related to support activities such as human resources. An efficient procurement department should be able to obtain the highest quality of goods and services at the lowest prices.

- **Technology development**, which includes know-how, research and development that are designed to support value-creating activities.

- **Human resource management** which include activities relating to employee recruiting, hiring, training, development, and compensation. It is important to recognise that human
resources are a source of competitive advantage. Therefore, it is important to recruit and retain the best employees.

- The firm’s infrastructure which includes activities associated with the organisational structure, control systems and company culture.

The firm's margin or profit is highly dependent on the effectiveness with which these activities are performed, to ensure that the amount that the customer is willing to pay for the products exceeds the cost of the activities in the value chain.

The main objective of the value chain is to maximise value creation while minimising costs. Its activities are not isolated from one another, but are interrelated and are the basis for creating customer value. Superior value can be generated through these activities and competitive advantage may be achieved by creating synergy in the value chain to provide lower cost or better differentiation (Thompson, 2001:343).

The value chain is established by linking the primary and support activities. Linkages in the value chain are important as behaviour in one part of the organisation can have an impact on another. For example, a process modification in a manufacturing concern could result in higher output, which in turn could lead to reduced production times and greater levels of customer service. Significant cost advantages can be yielded from strategic purchasing, efficient production and low-cost distribution which in turn increase the profit margin (Thompson, 2001:343).

2.3.3 Leveraging purchasing in the value chain

The access of purchasing to external markets and its networking nature enable purchasing personnel to gain important information about new technologies, potential new materials or services, new sources of supply, and changes in market conditions. Strategic networks with the supply market are essential for organisational success as they enhance competitive intelligence, which when effectively communicated can be used to reshape
the organisation's strategy to take advantage of market opportunities. It is therefore important to be flexible enough to keep abreast of market changes and strategic enough to ensure sustainable growth in the face of change and competition (Van Weele, 2005:21).

In addition, supplier development and relationship management are fundamental to purchasing success. It is the role of purchasing to support the organisation's strategic success by identifying and developing new and existing suppliers. Getting suppliers involved early in product development and modifications to existing offerings can reduce development times and effectively reduce time to market. By reaching the market quicker than competitors with new products or ideas an organisation can gain first-mover advantages and position the organisation as a market leader (Hill, 2009:187).

While it is important to develop and maintain good relationships with the supply base, purchasing endeavours to provide value to other functional areas by collaborating with them to meet the organisation’s objectives. Being well informed allows the purchasing function to better anticipate and support the needs of other functional areas. This support in turn leads to greater recognition and participation (Van Weele, 2005:21).

**2.4 OVERVIEW OF THE PURCHASING PROCESS**

The ways in which organisations meet their functional requirements differ from organisation to organisation, depending on their sizes, organisational systems in terms of the degree of automation, policies, functional procedures as well as the complexity of the requirements. The purchasing process can be defined as a series of activities that are aimed at acquiring the right products or services at the best quality and price. It includes activities such as determining specifications, supplier selection, contracting, ordering, monitoring of the contract and follow-up (Caridi et al., 2004:649).

As already mentioned in section 2.3.2, with respect to Porter’s value chain, purchasing links members of the supply chain and ensures supply chain efficiency. Therefore, the purchasing process, as depicted in Figure 2.3 cannot be effectively completed without
cross-functional integration and collaboration with suppliers. Cross-functional integration entails the collaboration of the expertise of individuals from various functional areas to enhance organisational performance. Collaboration with suppliers entails working with suppliers as partners to improve processes, enhance profitability and save costs (Burt et al., 2003:107).

FIGURE 2.3: THE PURCHASING PROCESS

needs analysis:
- Identify needs
- User requirements

Make or buy decision

Make

Buy

Buy some components

Identify purchase type
- New buy
- Straight re-buy
- Modified re-buy

Select supplier
- Market analysis
- Potential vendors
- Prescreen potential sources
- Evaluate remaining sources
- Choose supplier

Product and service delivery

Post-purchase vendor evaluation

Source: Coyle et al. (2003:121)
Successful completion of purchasing activities maximises value for the supply chain and takes place in the following process:

2.4.1 Needs analysis

The user area or department initiates a purchasing transaction as a result of a new or existing need. Specifications of the need are provided to ensure that the right item is purchased. Where there is a recurring need, the requirement is evaluated to determine whether there are any changes to the specifications. The purchasing process resumes as soon as the requirements have been clearly identified (Madapusi, 2008:525).

2.4.2 Make or buy decision

Once the need has been analysed, the firm does an internal evaluation to determine whether it will be cost effective to manufacture the requirement in-house or to source it from external suppliers. The decision to make or buy products is influenced by product lifecycle, lead time, raw material availability and available technology. If a make decision is made, some inputs or components might have to be purchased from external sources in order to manufacture what is required (Trim, 2005:387).

2.4.3 Identify the type of purchase

The type of purchase and its complexity determines the amount of time spent on the purchasing process. Examples of types of purchases are new buy, straight re-buy and modified re-buys (Coyle et al., 2003:121).

2.4.3.1 New buy

New buys occur when an organisation decides to buy completely new products from an unknown supplier. They are characterised by a high degree of uncertainty and risk. For example, a tyre manufacturing concern might decide to re-engineer its manual compound
mixing process by automating it. The decision could be a continuous improvement initiative. The purchase of a compound mixing machine would require careful scrutiny, in terms of costing and functionality. Thorough research would have to be done to determine the benefits and limitations of automation, cost implications would have to be carefully considered as well as lead times. Another example is one where a multinational manufacturer decides to implement the standardization of its proximity switches from the Telemecanique brand name to the Allan Bradely brand. Countries which have never previously used Allen Bradely, would regard the purchase as new (Coyle et al., 2003:121).

2.4.3.2 Straight re-buy

This type of purchase entails the acquisition of a known product from the same supplier. For example, a manufacturing concern that consumes diesel as part of its production process might buy diesel from Chevron or Sasol every week. Another example is the purchase of windscreens for a car manufacturer, where the specifications are the same as the previous order’s specifications. Little time is spent on straight re-buys due to the specifications and the supplier of the purchase remaining the same (Van Weele, 2005:31).

2.4.3.3 Modified re-buy

A purchase is regarded as a modified re-buy when an organisation decides to purchase a previously purchased product from an existing or new supplier. With modified re-buys, specifications such as length, weight or colour might be slightly amended. For example, company X uses pallet wrapping film in their distribution process, which it buys from Lithotech. Company X might ask Lithotech to change the thickness of the pallet wrapping film from 40 microns to 30 microns and its length from 600 metres to 500 metres. The modification to the specifications could be a cost saving initiative, whereby the reduction in thickness and length reduces the weight of each pallet wrapping film roll. The thickness and length reduction consequently reduce the cost per roll. The purchasing process for modified re-buys requires more time than new buys, due to uncertainty as the
modified product might undergo more screening than a new buy. It might need to be tested for functionality and quality (Van Weele, 2005: 31).

2.4.4 Select supplier

Once a decision has been made on the type of purchase that will be made – be it a new buy, straight re-buy or modified re-buy, the next step is to conduct a market analysis to determine the availability of sources of supply, prescreening such sources and selecting the most suitable supplier (Coyle et al., 2003, 121).

2.4.5 Product and service delivery

According to Caridi et al. (2004:649), the product and service delivery stage entails the fulfilment of the order, whereby the ordered materials or products get delivered by the selected supplier or a service is rendered.

2.4.6 Post-purchase vendor evaluation

Once the service has been rendered or the products have been delivered, it is imperative to evaluate the supplier’s performance to determine whether the selected supplier met all the customer’s requirements. Monitoring supplier performance by customers and providing continuous feedback is crucial for achieving and maintaining effective relationships between customers and suppliers (Talluri & Sarkis, 2002:4258).

2.5 CHAPTER SUMMARY

This chapter has provided an outline of purchasing, which is defined as the acquisition of goods and services that are required to fulfil an organisation’s objectives at the most favourable conditions (Wisner et al., 2009:39). The ultimate goal of purchasing is to obtain materials, parts and services that are required to manufacture products or render services, to develop and to implement purchasing plans for products and services that support operation strategies. Its traditional objectives can be summarised in terms of the five Rs which are: acquiring goods and services at the right price, right quality, in the
right quantity, at the right time and from the right source of supply. The function forms an interface with an organisation’s functional areas and with its suppliers (Stevenson, 2002:529).

The chapter also discussed how organisations categorise their purchasing departments, which include centralised, decentralised, hybrid, direct and indirect purchasing. It explains each category as well how categorising purchasing enables firms to manage expenditure and identify what constitutes tactical purchasing and what it is that requires a more strategic approach (Benton, 2007:12; Wisner et al., 2009:62; Van Weele, 2005:70 & Caridi et al., 2004:649).

Furthermore, various paradigm shifts in purchasing which transformed it from being an administrative and transitional function to a strategic function were discussed as well as projected future purchasing trends. The trend towards strategic purchasing is projected to be a tool that will be used by organisations to effectively streamline purchasing activities while seeking the benefits of centralisation by aggregating major purchases and ultimately reducing the total cost of ownership as opposed to the traditional purchasing approach whose sole focus was purchase price reduction. Greater focus will be given to green purchasing, inter-departmental and inter-organisational relationships as sources of competitive advantage (Benton 2007:13; Wisner et al., 2009:113).

The chapter reflects the role and importance of purchasing in its focus, its role in the value chain and how it leverages the value chain. Figure 2.2 explains the role of purchasing through Porter’s value chain (Thompson, 2001:343; Burt et al., 2003:28). It also provided a brief explanation of the purchasing process.

The next chapter discusses the theoretical foundation for the hypothesised model to improve indirect purchasing competitiveness.
CHAPTER 3

THE THEORETICAL FOUNDATION FOR THE HYPOTHESESISED MODEL TO IMPROVE INDIRECT PURCHASING COMPETITIVENESS

3.1 INTRODUCTION

As much as the business environment has undergone various paradigm shifts, which reengineered business processes and operations, some organisations have not kept up with and adapted to the changes. Some organisations still use old systems and their purchasing departments are still administrative and operational. Economic factors such as the global financial crisis, inflation, oil prices, exchange rate fluctuations, raw material price escalations, interest rate increases and slow economic growth pose a challenge for purchasing, as they affect the bottom-line. In addition, the increasing number of global competitors and suppliers, together with customer demands for organisations to support environmental conservation while being innovative, has led organisations to adopt a strategic approach to purchasing (Wisner et al., 2009:105).

3.2 INDIRECT PURCHASING COMPETITIVENESS

Blunc (2006:1) defines competitiveness as an organisation’s ability to provide products and services more effectively and efficiently than its competitors. In retrospect, competitiveness refers to the advantage obtained through superior productivity, in terms of organisational profitability and regional or global market share. The increase in world trade requires firms to leverage the opportunities presented by the international economy. According to Alvarez, Compos and Lasar (2010:2), for firms to increase indirect purchasing competitiveness and optimise efficiency, focus should be given to the following:

Total cost of ownership (TCO): This entails the strategic management of the total cost of acquiring, moving, holding, converting and supporting products and services throughout
the supply chain. When purchasing personnel apply the TCO concept, they base purchasing strategies and decisions on the calculation of all costs that are involved in the product and service life-cycle instead of just on the purchase price. This provides a transparent view of the total cost including shipping and insurance and leaves no room for hidden costs.

*Partnership philosophy:* This entails adopting a win-win negotiating philosophy with suppliers. Purchasing should seek to establish long-term relationships with suppliers to ensure mutual economic gains.

*Supply base reduction:* To successfully implement strategic purchasing initiatives, buyers should focus on reducing the supply base and move away from having too many suppliers for the same commodities. For example, if they have five suppliers for standard off-the-shelf tools and hardware, these could be reduced to two or three so as to avoid reliance on a single source.

*Fact-based negotiations:* When applying purchasing best practices, insight gained from market analysis should be used to the buying company's advantage during negotiations with suppliers. Insight pertaining to market performance, competitors, new products, substitute and complementary goods could strengthen the buyer's bargaining position.

*Enlightened perceptions of balance of power:* It is imperative for buyers to know and understand how much they spend with each supplier and leverage on each supplier’s business, competitiveness and capabilities.

Jaekle (2006:1) elaborates on indirect purchasing competitiveness through a practical example of how Intel improved the competitiveness of their indirect purchasing. Intel went through a downturn in its industry in 2002, with declining profit margins and escalating costs, particularly in indirect spending. The indirect purchasing expenditure included human resources (HR), finance, sales, marketing, travel, facilities management etc. Their purchasing executives, together with executives from other functional areas
realised that indirect spending was hindering revenue growth. They realised that there was a need to strategically manage indirect purchasing in order to drive organisational profitability.

The benefits of effective or competitive indirect purchasing were realised when Intel’s indirect purchasing developed and implemented a three-year strategic vision and direction by focusing on increasing the organisation’s capabilities. One of the key focus areas for improving indirect purchasing was to focus on improving purchasing business partnering skills and effectiveness. Partnering skills were improved by forming global cross-functional sourcing teams and sourcing councils of senior executives to ensure that all departments worked towards common objectives. Intel’s purchasing devised and implemented a formal stakeholder and business partnering engagement model aligning goals and processes. Cross-functional synergy developed as purchasing developed trust and credibility with other teams (Jaeckle, 2006:3).

All the functional areas worked together to leverage their functional expertise and market intelligence capabilities. Cost reduction strategies were jointly devised. Initially purchasing focused on small wins such as contract clean up, contract renewals, and small negotiations. Some departments, including human resources allowed purchasing to perform their designated activities, while other departments focused on their core functions. Electronic capabilities tools and processes were used to ensure that there was visibility of expenditure. Eventually substantial savings were realised, purchasing was available to provide tangible value and all functional units benefited (Jaeckle, 2006:5).

In the present study, indirect purchasing competitiveness (IPC) is defined as optimising purchasing efficiency by focusing on effectively managing the total cost of acquiring, moving, holding, converting and supporting products and services throughout the supply chain (Alvarez, Compos & Lasar 2010:2). It entails focusing on the effective management of the relationships between the buying and selling organisations and internal customers. This can be done through the effective management of supplier relationships, supply base reduction, customer relationship management, organisational
communication, systems efficiency and resistance to change. The study further suggests that IPC can be improved by pursuing elements of strategic purchasing.

3.3 STRATEGIC PURCHASING

Strategic purchasing is an ongoing process of finding the best suppliers, establishing long-term relationships with them and using these supplier relationships to maximise value for an organisation. According to Chen, Paulraj and Lado (2004:508), the promotion of long-term relationships by strategic purchasing fosters greater commitment, cooperation and trust between the involved parties, reduces functional conflict and enhances decision-making. Strategic purchasing increases supplier responsiveness, which enhances organisational financial performance, reduces unnecessary inventories and leads to cost savings for the purchasing firm (Moeller, Fassnacht & Klose, 2006: 71). It involves continuous improvement and ongoing assessment to ensure that the existing process strategically fits the buying objectives, which should be aligned with the corporate objectives (Wheaton, 2008:1).

According to Burt et al. (2003:18), strategic purchasing enhances organisational efficiency and competitiveness by focusing on the following activities:

3.3.1 Environmental monitoring

Environmental monitoring and scanning entail acquiring and using information about events, trends, and relationships in an organisation's external environment and using such knowledge for strategic planning purposes. Organisations scan the environment to understand the external forces of change in order to devise strategies and effective responses to those changes so as to secure or improve their future position. Failure to respond to changes could be detrimental to organisational success. These environmental forces include weakening currencies, changes in legislation, political climate and supplier consolidation (Cook, 2009:8).
Environmental changes that have changed South Africa’s automotive industry include the deregulation of trade barriers, introduction of the Based Black Economic Empowerment Act (BBBEE) and Motor Industrial Development Programme (MIDP). The deregulation of trade barriers which used to protect countries from international competitors by means of high tariffs on imported manufactured goods aggressively increased global competition (Hill, 2009:11).

In 2004, the South African government promulgated the Broad Based Black Economic Empowerment Act which seeks to include all South Africans in the mainstream economy and serves as a qualifier for supplier selection. The MIDP was introduced as a means to develop an internationally competitive and growing automotive industry capable of providing high-quality, affordable vehicles and components to the domestic and international markets. It was also aimed at providing sustainable employment and contributing to South Africa’s economic growth by increasing production. The MIDP has been revised since its inception and will be replaced by the Automotive Production and Development Programme (APDP) in 2013 (thedti.gov.za beecodes).

According to Cook (2009:13), the deregulation put pressure on South African organisations to reduce their costs to remain competitive. The MIDP triggered a need for greater competitive supplier pricing and encourages exports to counteract import duties. Adherence to the codes of good practice which underpin the BBBEE Act has become an important requirement for doing business and its elements are taken into consideration when selecting suppliers in South Africa. Buyers take into consideration the degree of supplier compliance with respect to BBBEE elements which include ownership, management control, employment equity, skills development, preferential procurement, enterprise development and socio-economic development.

It is therefore important for organisations to understand the supply markets and monitor the supply environment, as doing so enables them to identify threats and opportunities that exist in the market. Threats include material shortages and shipping problems which could affect the price of the purchased materials, which in turn could affect the final
selling price. Monitoring the impact of legislative changes, political changes and monopolies in the market is vital for devising strategic actions to mitigate any negative effects (Burt et al., 2003:19).

3.3.2 Integrated supply strategy

According to Benton (2007:13), as organisations streamline their process and become lean, organisations will move toward entering into long-term relationships with their suppliers. Strategic purchasing ensures the development of a holistic and all-encompassing strategy which integrates all supply chain activities to improve efficiency and avoid the development of separate conflicting strategies. The strategy therefore defines and integrates the mission and objectives of various functional areas (Burt et al., 2003:19).

3.3.3 Category or commodity strategies

Commodity strategies refer to strategies that are devised to improve purchasing efficiency by managing the purchase of various products according to their product groups. Purchasing develops strategies for obtaining all the required products and managing the expenditure thereon. An efficient purchasing team uses spend data to define the major spend categories and greater efficiency is achieved by working with the business stakeholders to develop detailed strategies for each category, e.g. capital equipment. Protective clothing, chemicals, hand tools, facilities management, human resources expenses and professional services all need detailed strategies (Rozier, 2009:2).

3.3.4 Data management

The collection and application of supply data should be done as a joint effort between purchasing, accounting and information technology in order to facilitate strategic supply planning. This is made possible by systems such as mySAP SRM, which link organisations to each other and provide them with real time information. They enable
efficient data management by ensuring that supply chain partners have accurate, consistent information which ensures efficient monitoring of supplier performance and purchasing processes. They also enable organisations to operate more efficiently in a global environment by supporting a variety of languages and currencies as well as taxation issues. Furthermore, SAP offers low total cost of ownership, can be implemented in phases based on quick wins and ensures effective management of relationships (SAP AG, 2006).

3.3.5 Strategic actions

The elements of purchasing include cross-organisational and cross-functional integration. The inter-dependence between purchasing and other functions is becoming stronger. By increasingly taking part in activities that have traditionally been performed by other functions, purchasing is able to reduce cost, get better discounts, reduce inventories and reduce administrative work. It focuses on forging long-term mutually beneficial relationships with key suppliers and individuals from other functional areas (Burt et al., 2003:20).

3.3.6 Strategic supply alliances

The development and maintenance of supply alliances are the most critical activities that organisations focus on due to the benefits yielded by such alliances. These benefits include knowledge sharing, sharing of market trends, development of cross-functional and cross-organisational strategies and reduction of production costs (Burt et al., 2003:21).

3.3.7 Supply chain networks

The development and maintenance of supply alliances are paralleled by the development and maintenance of supply networks. These are supported by information technology, and relational skills of the purchasing personnel (Burt et al., 2003:21).
3.3.8 Social responsibility

In recent years, there has been a growing awareness on the part of organisations of the importance of being involved in the communities where the organisations are located. A focus on developing and implementing environmental awareness programmes and supporting empowerment endeavours promotes organisational goodwill (Burt et al., 2003:21).

3.3.9 Understanding key supply industries

It is imperative for purchasing professionals to study and understand their supply base, supply base cost structures, technologies, culture and competitive nature in order to leverage supply base relationships. In so doing they will be able to build relationships with key suppliers and reap the benefits afforded by those relationship, which include cost reduction and shared knowledge (Burt et al., 2003:21).

3.4 OPTIMISING INDIRECT PURCHASING ACTIVITIES THROUGH STRATEGIC PURCHASING

Purchasing is gaining increased recognition and is being viewed as a vital strategic tool for driving efficiency. It should therefore be incorporated into the corporate strategy to ensure the attainment of a competitive advantage. Organisations should ensure that there are structures in place to reduce costs, improve efficiency, enhance performance at a business and functional level and eliminate non-value adding activities. Organisational focus should therefore be on determining the most efficient methods of purchasing and supply to ensure viability, sustainability and attainment of corporate objectives and purchasing competitiveness, particularly indirect purchasing (Kalenga & Brent, 2005:44).

According to Murugan and Narasimhan (2009:1), although indirect purchases represent up to 80% of the purchasing volume of most organisations, their management has not been treated as a high priority item. This results in lost saving opportunities. In the quest
to remain competitive and leverage indirect expenditure, organisations need to have a balance of disciplined processes, technology and cross-functional expertise. A strategic focus on purchasing can enable organisations to differentiate themselves in an increasingly competitive and global marketplace. The following are strategies that can be employed by organisations to improve effectiveness and increase competitiveness in indirect purchasing:

3.4.1 Supplier relationship management (SRM)

Traditionally, organisations treated purchasing as a strategically insignificant function which had no value-adding potential and was not seen as a source of competitive advantage. The nature of traditional internal and external relationships tended to be adversarial with buying organisations seeking short-term cost saving benefits, which they achieved by playing suppliers against each other on price offerings. This has changed over the years, with purchasing transforming itself into a strategic function which focuses on the long-term perspective of relationships (Moeller, Fassnacht & Klose, 2006:70).

Instead of pursuing short-term advantages in each transaction, buying organisations and their suppliers seek to work together in close collaboration for long-term mutual advantage. This is achieved by means of Supplier Relationship Management (Van Zyl, 2005:57). Van Zyl (2005:55) and Moeller et al. (2006:73) define supplier relationship management (SRM) as the systematic management of an organisation’s relationships with its suppliers in a manner that optimises the value that is delivered to the organisation by its suppliers.

Eulálío, Campelo and Wolffried (2007:105) maintain that SRM is the part of the supply chain management which incorporates all aspects of business relationships between organisations and their suppliers. It outlines the business structures and processes that are required by companies to develop and maintain strong relationships with their suppliers. It allows for the development and maintenance of strategic relationships with key
suppliers and enables organisations to adopt a new way of thinking with regard to the supply chain and promotes supply chain transparency (Wisner et al., 2009:514).

Van Zyl (2005:60) suggests that SRM is driven by the following factors:

- **Asset/Cost efficiency**: Organisations pursue SRM due to the mutually beneficial cost reductions that can be yielded. An evaluation of how the relationship can best optimise resources enables the buying organisations and their suppliers to reduce channel costs such as distribution costs, product and information handling costs, improve asset utilisation and reap the benefits of increased pooled managerial efficiencies.

- **Customer service**: SRM is an enabler of improved customer service levels, which contributes to an organisation’s differential competitive advantage. Improved on-time delivery, paperless order processing, accurate order deliveries, improved cycle times, improved fill rates, and process improvements are customer service factors that drive SRM.

- **Marketing advantage**: The prospect of marketing advantages such as joint advertising and sales promotion as well as reduced competitor price advantage drives the SRM focus. The cost savings yielded by the relationship can be translated into price reductions for customers. In addition, joint product development, co-branding opportunities, increased geographic coverage market saturation and access to the latest technology foster SRM.

- **Profit stability/growth**: SRM can lead to profit growth or reduced profit variability profit, as joint strategic planning between parties could contribute towards sustainable growth, market share stability and increased sales volume.

Many benefits accrue from SRM. Mahoney and Stroller (2009:2) state that the cross-organisational integration and collaboration yielded by SRM forges closer relations and improves trust between buyers and suppliers. It allows organisations to streamline the purchasing processes and synchronise their processes with key suppliers. In addition to ensuring mutually beneficial interaction, strategic relationships enable organisations to
collaborate with suppliers in determining and implementing initiatives that will ensure continuous improvement, continuity of supply, lowest landed cost, lowest total cost of ownership, performance management and improvement.

In seeking mutual benefits, SRM encourages supplier-oriented purchasing, whereby the purchasing organisation extends its focus beyond its own needs and success but extends its focus to include understanding and satisfying the needs of its targeted suppliers. This fosters mutual trust and commitment, and ensures that the purchasing organisation is positioned as the preferred customer and thus gets preferential treatment (Humphreys, Williams & Goebel, 2008: 329). Humphreys et al. (2008:329) suggest that SRM fosters the following supplier-oriented purchasing behaviour which contributes to organisational competitiveness:

- Openness of communication and information sharing.
- Joint goal setting and strategic planning.
- Volume purchasing.
- Developing long-term purchasing contracts.
- Loyalty.
- Acquisition and use of expertise and technical knowledge to benefit the supplier.
- Buying across a broader range of goods and services
- Adapting business processes to match and complement those of the supplier.
- Opportunity for co-developing and sharing supplier performance metrics.

Campelo and Wolffried (2007:106) suggest that indirect purchases can be better managed by means of electronic purchasing solutions. Electronic purchasing (e-purchasing) is regarded as a strategic tool for facilitating and managing indirect purchases and enabling effective SRM. E-purchasing solutions such as SAP SRM are adequate to support the purchase of indirect, low value and standard products. They support key purchasing processes, such as sourcing, product category management, expenditure analysis and expenditure management (SAP AG, 2006:2).
SRM can be best implemented when there is mutual agreement, co-ordination of organisational processes and synchronisation of operating systems. In the past, technological advancements such as electronic data interface and MRP systems made this possible, but nowadays it has been further enhanced by the World Wide Web and various on-line solutions. Such solutions allow for real-time information to be shared, and sharing of intellectual capital and also improve collaboration and communication. According to Van Zyl (2005:64), technological advancements automate critical areas of supplier relationships such as relationship creation, execution and management of orders as well as relationship sustenance. Automated solutions enable buyers to perform adequate SWOT analyses to determine which suppliers to do business with. They also enable order placement and management through web based catalogue systems. Against the above-mentioned literature review, it is therefore hypothesised that:

H1: SRM exerts a positive influence on indirect purchasing competitiveness

3.4.2 Supply base reduction (SBR)

In addition to supplier relationship management, the shift in market trends, changing buyer patterns and the growing need to maintain reliable supply networks have driven organisations into devising strategies to better manage their supply base. An organisation’s supply base is the list of suppliers that an organisation uses to acquire its materials, equipment, services and supplies (Wisner et al., 2009: 514).

According to Thawiwinyu and Laptaned (2009:11), the role of purchasing in supplier integration is critical, as purchasing scans the environment to identify the most suitable suppliers. Remaining competitive in an ever-changing business environment while leveraging the benefits of closer long-term relationships require purchasing organisations to strategically decide on the number of suppliers to maintain for various product categories. How an organisation decides on its supply base impacts on performance as supply chain design represents the ultimate core competency. Ogden (2004:1) argues that
an organisation is as good as its supply base, since a poor supply network can cripple an organisation’s ability to compete effectively in the market place.

Nowadays organisations adopt supply base reduction as a strategic tool for managing supplier relations. The rationale behind supply base reduction is that it is easier to increase the value of buyer-seller relationships and performance when fewer suppliers are involved. Supply base reduction policies have a positive impact on business operations as they narrow down the number of suppliers to those who best meet organisational requirements (Thawiwinyu & Laptaned, 2009:11).

Ogden (2006:4) lists the following as benefits that can be enjoyed by organisations that reduce their supply base:

- **Increased access to technology and innovation:** Supply base reduction encourages transparency, which ensures that there are open lines of communication between the buying organisation’s buyers and the suppliers. Maintaining close relationships with fewer suppliers enables all the involved parties to tap into each other’s technology. A wealth of information about market performance, trends and new products can be shared from supplier visits and discussions.

- **Decreased supplier management costs:** A reduced supply base is easier to manage than a larger supply base due to fewer purchase orders and fewer contracts that need to be negotiated. It also simplifies the process of supplier performance management and reduces development costs. Ordering in a manner that keeps the vendor’s cost low and focusing on overall best cost and adhering to agreements with suppliers also fosters good relations.

- **Increased efficiency:** Supply base reduction efforts increase efficiency as buyers deal with fewer suppliers while tailoring supplier development efforts to fewer suppliers ensures maximum resource allocation.
- *Increased productivity of purchasing employees:* Purchasing employees can become more productive as a result of supply base reduction as more time and energies are channelled towards more strategic activities instead of labor-intensive and time consuming processes.

- *Reduction in inventory levels, delivery and transportation costs:* Entering into contracts with fewer suppliers fosters transparency and can be instrumental into ensuring continuity of material supply. Buyer and supplier organisations can enter into consignment stock agreements, whereby inventory is kept at the buying organisation’s premises at the supplier’s cost. The inventory never appears on the company’s books as stock on hand and only gets recorded and paid for after being issued.

- *Other benefits:* Improved service levels, shorter lead times, reduced uncertainty and reduced prices are other benefits that can be yielded by supply base reduction.

Over the years organisations have been doing away with large supply bases and moving towards smaller supplier bases. In 1983 the United States automobile industry depended on 10,000 suppliers to purchase $103 billion’s worth of components from their tier one suppliers and by 2003 their supply base had been reduced to 375. Daimler Chrysler followed the supply base reduction trend by reducing its supply base from 3,200 to 750 between 1985 and 2007 (Benton, 2007:189).

According to Ogden (2004:1), it is more beneficial to deal with fewer suppliers than many, as it enhances efficiency. Figure 3.1 graphically depicts the benefits that were yielded by Fleet Corporation after reducing its supply base. Fleet Corporation yielded great benefits from reducing its supply base for truck bodies and chassis in order to have a lean, focused, world-class supply base which provides a competitive advantage. They reduced their supply base from 500,000 suppliers to 60,000. Ogden (2004:2) maintains that prior to the supply base reduction exercise, only 23 of Fleet Corporation’s suppliers sold more than $500,000 per annum. The spend aggregation enabled them to partner with
key suppliers, ensure low prices, high quality, timely delivery, strong customer support, and constant technological and innovative improvements.

**FIGURE 3.1: RELATIONSHIP BETWEEN THE NUMBER OF SUPPLIERS AND THE TYPE OF BUYER-SUPPLIER RELATIONSHIP**

![Diagram showing the relationship between the number of suppliers and the type of buyer-supplier relationship.](image)

While supply base reduction yields a myriad of benefits, it has the potential to open organisations to risks. For example, heavy reliance on a supplier can have disastrous effects if the supplier cannot meet the expectations in terms of material delivery or product quality (Benton, 2007:192). Robinson (2006) maintains that relationships that are too cosy can be open to manipulation and yield unfair advantages for certain suppliers. Overly friendly relationships whereby suppliers offer buyers gifts and gratuities tend to neutralise professional boundaries and are susceptible to abuse. Abuse can however be prevented by instilling a gifts and gratuities policy which outlines what is acceptable and what is not. Against this literature background, the following hypothesis is formulated:

**H2:** SBR exerts a positive influence on indirect purchasing competitiveness
3.4.3 Customer relationship management (CRM)

In addition to supplier relationship management and supply base reduction, purchasing effectiveness can be optimised by developing relationships with other departments such as production, marketing, maintenance, human resources and finance. In the context of purchasing, the development and maintenance of relationships with stakeholders is referred to as Customer Relationship Management (CRM). CRM is a customer-centric business philosophy which focuses on developing and maintaining strong long-lasting relationships with customers (Schuster & Dufek, 2004:122).

According to Wisner et al. (2009:349), in most organisations, the focus of CRM has for a long time been on meeting external customer needs, improving satisfaction levels and attracting other customers. Organisations have realised that the management of internal relationships is of equal importance, as it creates cross-functional integration and cohesion with stakeholders. Cross-functional teams have become essential for addressing various supply management related activities such as new product development, value analysis, value engineering, standardisation initiatives and development of strategic alliances (Burt et al., 2003:106).

According to Dayan (2007:8), effective CRM integrates an organisation’s functional units, processes and technology in a manner that maximises internal relationships. It fosters mutually beneficial relations and develops and maintains trust between the purchasing department and its stakeholders. CRM ensures quick response to customer or stakeholder requirements and accurate processing of data relating to those requirements. CRM encourages improved communication between purchasing and other functional areas, which in turn impacts on overall organisational performance. It also fosters cross-functional synergy and cohesion.

Thompson (2001:1128) describes synergy as mutual benefits which are accrued from the linkage or integration between the buying and supplying organisations or from increased cooperation between an organisation’s departments. Examples of such synergy can be...
seen during a new product development process, whereby marketing has information on customer requirements. Knowledge of current and future design processes, manufacturing processes and obstacles at engineering’s disposal can be crucial for strategic planning and decision-making. Management of such knowledge can be used to enhance CRM efficiency and the support rendered by purchasing to other functional areas (Burt et al., 2003:107).

Van Zyl (2003:2) defines knowledge management as a business discipline that attempts to identify and capture knowledge, promote the sharing of the captured knowledge between individuals and use it for the creation of new knowledge. It involves using the knowledge as a business asset that should be maintained and exploited to the benefit of the organisation. Knowledge sharing and good relationships between cross-functional team members ensure that planning and design time are reduced, costs are reduced and all potential product-related problems are addressed prior to production.

Cross-functional teams as illustrated in Figure 3.2, in relation to CRM enable organisations to improve overall profitability and enhance product quality as professionals from various departments combine their knowledge and skills for the good of the organisation. These teams can devise initiatives to reduce manufacturing costs, inventory handling costs and improve price offerings to consumers. Synergy which could lead to the development of profitable products could result when cross-functional professionals get together to share their respective expertise and all involved at appropriate points in the process. Against the above-mentioned literature review, the following hypothesis is formulated:

H3: CRM exerts a positive influence on indirect purchasing competitiveness
3.4.4 Organisational communication

Organisational communication has a significant impact on the success of modern-day businesses that are increasingly operating in a global environment. This section briefly discusses the importance of organisational communication to organisational success and how organisations can utilise inter-organisational and inter-departmental communication to improve efficiency and their competitive advantage.
Bagraim et al. (2007:162) define organisational communication as the process through which information is exchanged between two or more people in an organisation, where meaning is created with the purpose of influencing behaviour or relaying a message. According to Berger (2008:2), it is a phenomenon that exists in organisations, whereby the organisation acts as container or channel through which employees share information, create relationships and formulate a culture and values.

According to Bagraim et al. (2007:164), no group can function without effective and adequate communication systems, as they are the kind of communication that yield the expected outcome. Effective and adequate communication systems allow for policies to be transmitted, team spirit and cooperation to be built and strategic direction to be given to employees. Departmental and inter-departmental communication is crucial for relationship building, aids in developing organisational capabilities, and helps individuals and groups to coordinate activities and achieve goals.

In relation to purchasing, communication entails making available and clarifying the purchasing policy and acceptable business conduct. For example, the purchasing policy should clearly communicate the purchasing procedure, specify the levels of authority in relation to purchase order values and specify the regulations regarding gifts and annuities from suppliers. Effective communication between purchasing team members ensures that members leverage their individual skills, strengths and expertise to achieve functional objectives. When there are workload challenges, buyers can brainstorm on how to align the material categories accordingly (Burt et al., 2003:114).

Inter-departmental communication contributes to organisational effectiveness by being a strategic tool in the socialisation of new employees, decision-making, problem-solving and coordinating change-management processes (Berger, 2008:2). Berger (2008:2) suggests that internal communication also provides employees with important information pertaining to their jobs and organisational changes. It is a channel through which functional policies, procedures, processes and expectations can be explained, to ensure that departments understand and support each other’s objectives. Understanding
between functional areas makes the implementation of continuous improvement initiatives easy. Communication is used to motivate, build trust, and provide a way for individuals to express emotions and aspirations. Trust facilitates relationships between and within organisations and thus reduces transaction costs (Manuel & Gupta, 2003:32).

According to Coyle et al. (2003:99), nowadays effective communication is made possible by the internet and electronic data interchange (EDI). EDI or internet-based communications reduce order information errors, which speeds up orders through the supply chain. Communication between buyers and suppliers is vital for customer monitoring and supplier performance evaluation. Open channels of communication enable suppliers to provide efficient and economical services, for discounts to be negotiated, orders are followed up and processes improved. The literature review on organisational communication leads to the formulation of the following hypothesis:

H4: Organisational communication exerts a positive influence on indirect purchasing competitiveness

3.4.5 Resistance to change

Organisations depend on both the internal and external environment in which they operate to provide labour, materials, technology, finance, information and capital as inputs for their production processes. For organisations to compete successfully both locally and globally, they need to embrace innovation and transformation. In today’s turbulent business environment, a key success factor and competitive advantage is the ability to keep up with the pace of and navigate change effectively (Vales, 2007:27). Changes in the environment in which organisations operate could impact on the conditions under which they operate. Changes could cause organisations to move from being stable to being unstable with much uncertainty (Cook, 2009:8).

Organisational and functional changes are usually driven by external and internal environmental forces. External environmental forces such as political factors, shifting
demographics, shorter product lifecycles, ever-changing customer preferences and technological advancements force organisations to adapt or die. Internal environmental forces of change occur as a result of life cycle evolution, the redesign of core structures and expectations and employee expectations. Internal forces refer to an organisation’s culture, systems, technologies, reporting structures (Swanepoel et al., 2003:728).

According to Bagraim et al. (2007:374), organisations develop organisational change and innovation programmes which are aimed at ensuring increased response to customer needs, increased productivity and efficiency through employee involvement, developing flexible organisational and management strategies and adapting to environmental changes. Bagraim et al. (2007:375) demonstrate the need for continuous change renewal by means of a sigmoid curve which is illustrated in Figure 3.3.

**FIGURE 3.3: THE SIGMOID CURVE**

![The Sigmoid Curve](image.png)

Source: Bagraim et al. (2007:375)

According to Bagraim et al. (2007:375), it would be ideal for organisations and functional teams to be proactive and anticipate the need for change early on while they are at their peak performance (point A) so as to prevent a decline in performance at a later stage. Bagraim et al. (2007:375) suggest that all organisations and functional teams
develop to a point where decline takes place, which is denoted by point B on the curve, which is the point where collapse is inevitable. Therefore organisations and their functional teams should continuously devise strategies that will help them create and maintain a competitive advantage.

According to Thompson (2001: 861), from time to time organisations and functional teams have to deal with technological, product, administrative, structural and attitude changes. Technological changes include changing from a manually operated production process to an automated one which uses robots, and the introduction of electronic purchasing by means of SAP or Oracle systems. Technological changes impact on product changes, in that automation improves production output and quality. When an organisation decides to launch a new product or modify an existing product, a need to invest in new equipment might arise and employee would have to be trained in operating the new equipment.

Structure, policies and reward systems – all reflect administrative changes. From a purchasing perspective, examples of administrative changes are the development of cross-functional teams and global sourcing teams in multinational organisations. Although the development of global sourcing teams might add bureaucracy, it allows opportunities for purchases to be consolidated country-wide at lower rates. Embracing change and even sourcing raw materials from low cost countries like China reduces manufacturing costs and the reduction can be passed on to customers and thus enhance competitiveness (Bagraim et al., 2007:374).

Since 1994, due to political influence, South African organisations have had to incorporate affirmative action and black economic empowerment in their workforce planning strategies in order to create equal work opportunities for all members of the society (Swanepoel et al., 2003:122). Economic pressures, emerging markets and increased global competition have been catalysts for change, as organisations need to transform and reposition themselves in order to remain competitive. Change affects people, their jobs, perceptions and behaviour and impacts on organisational culture – all
of which can make employees wary or hostile and thus resist it (Thompson, 2001:859). Caruth, Middlebrook and Rachel (2001:23), Swanepoel et al. (2003:122) and Bagraim et al. (2007:390) cite the reasons for change resistance in Table 3.1:

**TABLE 3.1 REASONS FOR RESISTANCE TO CHANGE**

<table>
<thead>
<tr>
<th>Individual resistance</th>
<th>Managerial resistance</th>
<th>Organisational resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Fear of the unknown</td>
<td>-Fear of the unknown</td>
<td>-Cost, time and effort to change</td>
</tr>
<tr>
<td>-Fear of reduced job security</td>
<td>-Loss of status and authority</td>
<td>-Organisational culture</td>
</tr>
<tr>
<td>-Fear of job loss</td>
<td>-Exposure of previously inadequate approaches and behaviour</td>
<td>-Bureaucracy</td>
</tr>
<tr>
<td>-Fear of demotion</td>
<td>-Change in territorial authority</td>
<td>-Maintaining stability</td>
</tr>
<tr>
<td>-Self-interest and being in a comfort zone</td>
<td>-Added responsibility</td>
<td>-Past agreements with suppliers, trade unions and customers</td>
</tr>
<tr>
<td>-Distrust of management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bagraim et al. (2007:390)

Resistance to change infringes upon effectiveness and growth and can adversely affect an organisation’s competitive position. According to Goliath Business News (2008), effective management of culture is a key driver of the success of a change and organisations will succeed in implementing change if they do the following:

- Define and clarify the concept of culture change.
- Explain why culture change is critical to organisational success.
- Define a process for assessing the current culture, desired future culture, and the gap between the two.
- Identify alternative approaches to creating a culture of change.
- Create an action plan that integrates multiple approaches to change, one which ensures that all employees are participant in the change process so as to make them feel as if they are part of the change process and it is not imposed upon them.
- Implement and manage the culture change.
- Integrate change into the culture by ensuring that organisations continually evolve.

In addition, Caruth, Middlebrook and Rachel (2001:26) suggest that organisations could overcome resistance to change if managers were to have the right attitude, as their negative attitude could filter to the subordinates. They therefore need to create the right attitude towards change in their employees, communicate the implications of change, how it will benefit them and what is expected of them. It is vital to solicit the views of the employees so as to establish what they understand of any upcoming changes and ensure that there are no misunderstandings. To avoid the negative impact of resistance, an organisation that is undergoing a major change can appoint a change agent to guide, direct, nurture employees through the process and spearhead the process. The preceding literature review, leads to the following hypothesis:

H5: Organisational communication exerts a positive influence on indirect purchasing competitiveness

3.4.6 Systems efficiency

Modern-day organisations are constantly devising strategies for improving product and service quality and performance while reducing costs. They support these strategies by implementing quality management practices and related information systems and increasingly view purchasing and quality management as being interrelated. There increasingly is a need to coordinate purchasing with other functional areas and suppliers to ensure product, process and quality success. Information systems are used to enable and support this coordination (Hemsworth, Sa´nchez-Rodri´guez, & Bidgood, 2008:1).

Information is a catalyst for efficient decision-making and its management can be a source of competitive advantage (Thompson, 2001:486). The advent of EDI systems has led to an improvement in cross-functional and organisational efficiency, increased reliability and reduced costs and order cycle times, and increased customer satisfaction.
Information systems are used for improving, monitoring and controlling the purchasing function by enhancing the organisation’s operational efficiency (Thawiwinyu & Laptaned, 2009:8).

The increase in electronic commerce applications is leading organisations to channel massive investments into innovative technologies, in order to maintain their competitive edge in a dynamic market. Other electronic advancements such as internet portals and various business to business (B2B) applications present modern-day businesses with great opportunities for improving effectiveness and efficiency. These applications minimise costs and facilitate efficiency in the internal supply and planning processes of organisations throughout the supply chain, without compelling organisations to adopt common operating systems or share the same databases (Caridi et al., 2004:648).

According to Thawiwinyu and Laptaned (2009:12), information systems allow companies with a market focus to use IT technologies to improve their strategy and as a means to improve efficiency, reduce operating costs or to improve productivity. Thawiwinyu and Laptaned (2009:8) suggest that such firms gain effectiveness which comes from using IT to foster greater flexibility and responsiveness to changing market needs. The efficient management of organisational information systems exposes decision-makers to real time information about inventory status, customer information and supplier performance.

According to Tuteja (2004:2), an efficient system is one which does not only provide decision-making information, but is easy to operate and enables indirect purchases to be automated, thereby eliminating time consuming manual operations. The transparency afforded by process automation reduces unplanned expenditure and ensures adequate record keeping. Automation helps organisations to categorise their purchases according to commodity types which allows for volume consolidation and quantity discounts.

Efficient systems facilitate the management and control of vendor managed inventories or consignment stock. They provide real-time information regarding the movements of the consigned inventory. They also allow for electronic catalogues of indirect
requirements to be created and managed, thereby providing employees with the right mix of product and aid in keeping track of negotiated price (Tuteja, 2004:2).

Organisations are increasingly investing in efficient systems such as SAP in order to better manage relationships and to ensure compliance with negotiated contracts which contribute to overall competitiveness. These systems help organisations to adhere to new regulations such as the Sarbanes Oxley Act, which require companies to establish and document business controls, procedures for tracking and reporting material business information, procedures and systems for ensuring compliance and auditing. They extend the value of existing sourcing, procurement, and ERP technology investments and improve product development and inventory management operations. They support the principles of lean production by identifying waste elimination opportunities and ensure proper corporate governance and control (Minahan, & Degnan, 2004:13).

As much as organisations invest in systems to improve efficiency, it is vital for users to be properly trained and for investments in continuous training of employees on information systems utilisation to be made in order to reap maximum value from technological investments. This statement is practically illustrated in the example in Figures 3.4a and 3.4b.
**CASE OF COMPANY X**

According to a former employee at a manufacturing concern, which will be referred to as Company X, their organisation used to use a manual paper system for order processing, whereby requestors would write their requirements on a piece of paper, the purchasing section would then sign them as purchase approvals. The paper system was susceptible to risk, in terms of changes being made after approval or the paperwork being lost. In 2000, they adopted the use of SAP. Although SAP was meant to improve the process, maximum tangible value was not realised, as they duplicated their work by filling in paper requisitions, which were signed by the manager as approval for electronic capture in SAP.

Company X’s purchasing manager insisted on keeping a paper trail with purchase requisition forms in order to see beforehand what was being purchased and to prevent unnecessary expenditure. However, the completion of purchase requisition forms and signing by management prior to electronic purchase requisitions being created were non-value adding activities. There was a problem of duplication of work and time was wasted through the clerk getting prices, completing the forms and acquiring signatures from management. The process was repeated with SAP requisitions being created and they would go through the approval process. Furthermore, work duplication was also evidenced by buyers verifying prices, which means that suppliers were called twice for the same thing.

Other forms of waste were inappropriate processing whereby purchase requisitions were created with incorrect specifications such as wrong part numbers, incorrect descriptions and values. In instances where the requisition price was different from that acquired by the buyers, the system would send the requisition back to the manager for re-approval on
C4. The re-approvals caused further delays in the process because at times items for re-approval would not appear on the manager SAP workflows and purchase requisitions would get stuck in the system, which led to order batching. Another problem was that the SAP system was not synchronised adequately. At times the MRP would not generate automatic requisitions when necessary for stock items, which resulted in out of stock situations. The inefficiencies in the process were realised and a SAP consultant worked with them to improve their process.

Company X streamlined their process to save time, paper and ink, while making maximum use of the resources at their disposal. They eliminated the paper requisitions and stakeholders created requisitions directly in SAP and the manager approved them if the requirements were within budget. If budget was exceeded and to maintain transparency and avoid inappropriate spending, SAP would send the requisitions to management for re-approval, after any pricing changes were made by buyers. Further proposals were made for the organisation to invest in SAP reconfiguration, whereby a person can click on the next approver’s name and an automatic e-mail will be sent to the person, in order to avoid processing delays.

Company-wide awareness of the impact of inappropriate processing was raised through workshops, during which employees were encouraged to adopt a learning culture, committed to continuous improvement, with a mindset of partnering with instead of working for the organisation. SAP-retraining was conducted and detailed SAP user manuals were distributed to all authorised users. The flow diagram in Figure 3.4 illustrates the SAP improvement process that was introduced in 2007.

Source: Improving system’s efficiency at Company X. 2010. Interview with former purchasing practitioner at Company X. Port Elizabeth.
The preceding literature review leads to the following hypothesis:

H6: Systems efficiency exerts a positive influence on organisational effectiveness.

Section 3.4.1 to 3.4.6 explained the hypothesised relationship among the variables investigated in this study. These relationships are graphically depicted in Figure 3.5.
FIGURE 3.5: THE HYPOTHESED MODEL TO IMPROVE INDIRECT PURCHASING COMPETITIVENESS

3.5 CHAPTER SUMMARY

It is not business as usual in the world of purchasing, which due to globalisation, emerging markets, technological advancements and changing consumer preferences has seen the function evolve through various paradigms over the years. Emphasis of the need for cross-functional cohesion in organisations is depicted in Figure 3.2, which outlines the purchasing environment. Firms can optimise indirect purchasing by adopting a strategic approach to purchasing. Competitiveness can be enhanced by forging closer
long-term relationships through SRM, supply base reduction, and CRM. Communication contributes to organisational competitiveness by enabling purchasing to create mutually beneficial relationships with internal and external stakeholders.

Internal and external forces of change threaten the ability for organisations to stay competitive and therefore necessitate constant innovation and transformation. Change is not always embraced as it tends to make people feel insecure. Therefore putting structures in place such as involving people from the change planning stages makes it easy to adopt as people take ownership of their own ideas. Efficient organisational communication, putting structures in place to mitigate resistance to change as well as focusing on improving the effectiveness of indirect purchasing will go a long way towards enhancing overall organisational effectiveness.

In the next chapter an outline of the research methodology used for the investigation is provided. It includes the research paradigm, sampling design or method and the measuring instruments. Chapter 4 also discusses the results of the validity and reliability assessments of the instruments that were used in the study.
CHAPTER 4

THE METHODOLOGY OF THE STUDY AND EMPIRICAL RESULTS

4.1 INTRODUCTION

Chapters Two and Three introduced readers to the activities of the purchasing function, outlining how a strategic approach to performing such activities can be adopted to improve efficiency and increase competitiveness. Examples of how certain organisations successfully implemented strategic purchasing were also presented.

This chapter provides an overview of the general research methods and outlines the broad methodology that was followed in the empirical study. It constitutes an explanation of the applied research methodology, including the research paradigm, the sample and pilot study. The measuring instrument that was used, with respect to its reliability and validity will be discussed. An explanation of the data collection and the empirical results of the study will also be provided.

4.2 RESEARCH PARADIGM

According to Collis and Hussey (2003:1), research should be thorough, rigorous, conducted systematically and address a specific problem. Therefore careful attention should be given to the methodology used to conduct research. Research methodology, also known as the research paradigm, refers to the overall approach to the research process and how research is viewed with respect to how data are collected and analysed (Collis & Hussey, 2003:55).

According to Collis and Hussey (2003:47), there are two main research paradigms which can be employed for research data collection purposes. They are the positivist (quantitative) and phenomenological (qualitative) paradigms. A positivistic paradigm is used to answer questions pertaining to relationships and correlation between measured
variables in order to explain, control and predict phenomena. Hypotheses between two or more variables are formulated and quantitative research leads to a confirmation or disconfirmation of the tested hypotheses (Lancaster, 2005:67).

Positivistic research seeks facts or causes of phenomena, focuses on and produces quantitative data through questionnaires, focus groups, interviews and experiments. Cooper and Schindler (2001:142) refer to focus groups as a panel of people led by a trained moderator who meet for a set period and exchange ideas, feelings and experiences on specific topics. Positivistic data are regarded as being objective and are associated with the more traditional and scientific approach to research as the information can be quantified.

A phenomenological paradigm attempts to understand people’s perceptions, perspectives, and understanding of particular situations. It is based on the belief that the researcher’s ability to interpret and make sense of what he or she sees is critical for an understanding of any social phenomenon. It is difficult to quantify and has low reliability, as it uses small samples and produces qualitative data which are regarded as being subjective (Collis & Hussey, 2003:55). Lancaster (2005:76) suggests that although the main research paradigms are quantitative and qualitative research, some project requirements warrant that both quantitative and qualitative methods of data collection be used. This method is referred to as triangulation and leads to a theory from one discipline such as marketing being taken and used to explain a phenomenon in another discipline such as purchasing (Collis & Hussey 2003:78).
TABLE 4.1: POSITIVISTIC VERSUS PHENOMENOLOGICAL RESEARCH

<table>
<thead>
<tr>
<th></th>
<th>Positivistic research</th>
<th>Phenomenological research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose:</strong></td>
<td>- To gain understanding of underlying reasons and motivations.</td>
<td>- To quantify data and generalise results from a sample to the population of interest.</td>
</tr>
<tr>
<td></td>
<td>- To provide insights into the setting of a problem, generating ideas and/or hypotheses for later quantitative research to uncover prevalent trends in thought and opinion.</td>
<td>- To measure the incidence of various views and opinions in a chosen sample.</td>
</tr>
<tr>
<td><strong>Sample</strong></td>
<td>- Usually a small number of non-representative cases.</td>
<td>- Usually a large number of cases representing the population of interest – at least 30.</td>
</tr>
<tr>
<td></td>
<td>- Respondents selected to fulfil a given quota.</td>
<td>- Randomly selected respondents.</td>
</tr>
<tr>
<td><strong>Data collection</strong></td>
<td>- Unstructured or semi-structured techniques e.g. individual depth interviews or group discussions.</td>
<td>- Structured techniques such as interviews.</td>
</tr>
<tr>
<td><strong>Data analysis</strong></td>
<td>- Non-statistical.</td>
<td>- Statistical, in the table format.</td>
</tr>
<tr>
<td></td>
<td>- Findings are inconclusive.</td>
<td>- Findings are conclusive and usually descriptive in nature.</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>- Exploratory or investigative.</td>
<td>- Used to recommend a final course of action.</td>
</tr>
<tr>
<td></td>
<td>- Findings are inconclusive.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Develop understanding and sound base for further decision-making.</td>
<td></td>
</tr>
</tbody>
</table>


In seeking to improve effectiveness and understand people’s perceptions on the subject of study as well as determine whether a relationship exists between the variables mentioned in Chapter One, the triangulation method was selected for the research study. As the
research study will use some aspects of both the positivistic and the phenomenological methods, Table 4.1 outlines the main differences between the two research methods.

4.3 THE SAMPLE

Selecting a sample is an important element when conducting research. A sample is made up of some of the members of the population under study. A population may be referred to as a body of people or any other collection of items under consideration for research purposes. When a population is small the researcher can include the entire population in the study. This type of research is called a census study because data are gathered on every member of the population (Collis & Hussey, 2003:155).

Sample types are mainly grouped into two categories – probability (objective) and non-probability (subjective) samples. In probability samples, the entire number of respondents from whom the probability sample will be drawn is known in advance and each member of the population has a non-zero probability of being selected. On the other hand, in non-probability sampling, members are selected from the population in some non-random manner. Probability sampling methods include random sampling, systematic sampling, and stratified sampling. Non-probability sampling includes convenience sampling, judgment sampling, quota sampling, and snowball sampling (Evans, 2010:144).

Convenience sampling was used in the empirical study to select 50 out of a possible 60 purchasing and supply chain practitioners in the manufacturing industry in the Nelson Mandela Metropolitan Municipality. As the name implies, the sample was selected with a view to convenience, without incurring the cost or time required to select a random sample (Thomas, 2004:108). A mail survey, in a questionnaire format, was conducted of all fifty purchasing and supply chain practitioners from fourteen manufacturing companies. The organisations where the participants of the study work had down-sized their operations during the global economic recession and some operate with two to three buyers in their indirect purchasing departments. This therefore limited the number of participants in this study.
Only forty (40) usable questionnaires were returned from the selected fourteen organisations. This translated into a response rate of 80.0%, which is depicted in Figure 4.1. The purchasing and supply chain practitioners consisted of individuals from various management, engineering and maintenance positions.

**FIGURE 4.1: SURVEY QUESTIONNAIRE RESPONSE RATE**

![Pie chart showing response rate](chart)

Figure 4.2 illustrates that 57.5% of the respondents were male and 42.5% were female. This seemingly fair gender composition is indicative of the strides towards transformation that the manufacturing sector has been taking over the years. In the past, the manufacturing industry, including its supply chain, was dominated by white males. Nowadays many women occupy previously “male positions” in management, engineering and architecture etcetera.

There are now more opportunities for females in the manufacturing and technical field. This can be attributed to the growing interest on the part of females as well as opportunities presented through legislative structures such as affirmative action, broad based black economic empowerment (BBBEE) and the Employment Equity Act. There is growing pressure on businesses to comply with government legislation with respect to
BBBEE and affirmative action as there is an increase in compliance being a prerequisite for supplier selection (Cook, 2009:13).

**FIGURE 4.2: RESPONSE RATE BY GENDER**

The demographic composition of the respondents is depicted in Table 4.2 below. It shows that of the forty respondents, 40.0% were Afrikaans speaking, 37.5% English speaking and 22.5% Xhosa speaking.

**TABLE 4.2: DEMOGRAPHIC COMPOSITION OF THE SAMPLE**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>23</td>
<td>57.5</td>
</tr>
<tr>
<td>Male</td>
<td>17</td>
<td>42.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Home language</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afrikaans</td>
<td>16</td>
<td>40.0</td>
</tr>
<tr>
<td>English</td>
<td>15</td>
<td>37.5</td>
</tr>
<tr>
<td>Xhosa</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age group</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>7</td>
<td>17.5</td>
</tr>
<tr>
<td>30-39</td>
<td>19</td>
<td>47.5</td>
</tr>
<tr>
<td>40-49</td>
<td>12</td>
<td>30.0</td>
</tr>
<tr>
<td>50-59</td>
<td>2</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Figure 4.3 indicates 19 were aged between thirty to thirty-nine years old, 12 were in the forty to forty-nine year age group, seven were between twenty to twenty-nine years old and two were in their fifties. This translates to 47.5%, 30.0%, 17.5% and 5% percent respectively. The age group profile, coupled with the rest of the demographic composition in Table 4.2 highlights the maturity of the respondents as well as diversity within their organisations. Age diversity places the organisations at an advantage, as much knowledge and expertise can be gleaned from older employees as well as new ideas from younger ones who generally tend to exude more technological savvy. The age gaps present opportunities for employees to learn from each other and for succession plans to be put in place to ensure ongoing competitiveness.

FIGURE 4.3: RESPONSE RATE BY AGE GROUP

Table 4.3 indicates that the majority of the respondents had obtained first degree and diploma qualifications. The response rate from diploma graduates was 50.0% while 35.0% was from those with various first degree qualifications in fields such as commerce, engineering and purchasing. The response rate from individuals who did not study beyond matriculation was 12.5% for those with senior certificates (matriculation) while 2.5% reported that they obtained supply chain certificates as their highest qualification.
Most of the respondents (50.0%) held senior level positions in the organisations for which they work, while 17.5% were in middle management, 12.0% in senior management, 10.0% in supervisory positions, 7.5% were junior employees and directors were represented by only 2.5% of the respondents.

Half of the respondents (50.0%) had job tenures at their current employer of less than five years, 20% had tenures ranging between five and nine years, 15.0% had job tenures of ten to fourteen years, and 5.0% had fifteen to nineteen years’ experience, while 10.0% had job tenures greater than twenty years with their current employers. More than half (55.0%) of the respondents had been in their current positions for less than five years, a quarter of them (25.0%) had occupied their current positions for five to nine years, while about thirteen percent (12.5%) had been in the same positions for ten to fifteen years. About three percent (2.5%) of the respondents had been in their positions for about fifteen to nineteen years and five percent for over twenty years.

**TABLE 4.3 LEVEL OF EDUCATION AND YEARS OF EXPERIENCE**

<table>
<thead>
<tr>
<th>Highest Qualification</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>20</td>
<td>50.0</td>
</tr>
<tr>
<td>Degree</td>
<td>14</td>
<td>35.0</td>
</tr>
<tr>
<td>Matriculation</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>Supply Chain Certificate</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director Level</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Senior Management Level</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>Middle Management Level</td>
<td>7</td>
<td>17.5</td>
</tr>
<tr>
<td>Supervisory Level</td>
<td>4</td>
<td>10.0</td>
</tr>
<tr>
<td>Junior Level</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Senior Level</td>
<td>20</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
TABLE 4.3 LEVEL OF EDUCATION AND YEARS OF EXPERIENCE
(CONTINUED)

<table>
<thead>
<tr>
<th>Tenure with current employer (yrs)</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5</td>
<td>20</td>
<td>50.0</td>
</tr>
<tr>
<td>5-9</td>
<td>8</td>
<td>20.0</td>
</tr>
<tr>
<td>10-14</td>
<td>6</td>
<td>15.0</td>
</tr>
<tr>
<td>15-19</td>
<td>2</td>
<td>5.0</td>
</tr>
<tr>
<td>20+</td>
<td>4</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tenure in current position (yrs)</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5</td>
<td>22</td>
<td>55.0</td>
</tr>
<tr>
<td>5-9</td>
<td>10</td>
<td>25.0</td>
</tr>
<tr>
<td>10-14</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>15-19</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>20+</td>
<td>2</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.3 indicates that the majority of the sample participants are qualified for their jobs and have substantial work experience. These characteristics are essential for modern-day purchasing and supply chain practitioners who have to keep abreast of the constantly changing business environment. However, organisations should guard against individuals occupying the same positions for a long time, as complacency might set in and such individuals could be the ones who resist change as mentioned in Chapter Three.

Figure 4.4 depicts various information systems software packages that can be used to enhance purchasing efficiency. It appears as though the respondents have been provided with tools to support them in processing transactions and making decisions. According to 32.5%, their organisations use SAP R3, while 22.5% use SAP R3 in conjunction with the Ariba system, and 15.0% use only the Ariba system. Five percent (5.0%) of the respondents use MFGPRO, 5.0% use MAPICS and another 5.0% use BAAN. About 15.0 percent confirmed the use of SAP R2, Oracle, Syspro, DOFR, Pastel, with each representing 2.5 percent.
4.4 THE MEASURING INSTRUMENTS AND DATA ANALYSES

After a secondary literature review on strategic purchasing, which focused on strategies for improving effectiveness and competitiveness in indirect purchasing had been conducted, a self-constructed measuring instrument in the form of a questionnaire was constructed and used to collect the primary data and measure the variables. According to Collis and Hussey (2003:173), questionnaires are associated with both the positivistic and phenomenological methodologies.

A questionnaire consists of a list of carefully structured questions, which are selected to acquire reliable responses from a chosen sample. Questionnaires are used to gather routine information and determine what the selected group of participants do, think or feel through closed questions. Questionnaires also make use of open-ended questions, which provide more insight into the views of the participants (Lancaster, 2005:141).
The questionnaire used in this research consisted of mostly closed and a few open-ended questions which were based on the content analyses of the literature review of the variables. It is divided into eight sections. Section A covers the closed questions and the respondents’ demographic composition. These closed questions were used to elicit consistent responses from respondents on the latent variables measured in this study.

Self-constructed measuring instruments based on the indicated secondary literature sources were used to measure the latent variables listed below:

- Supplier relationship management (Campelo & Wolffried, 2007; Mahoney & Stroller, 2009; Moeller, Fassnacht & Klose, 2006; Minahan & Degnan, 2004; Humphreys, Williams & Goebel, 2008; Van Zyl, 2005; Schuster & Dufek, 2004; SAP AG, 2006; Wisner, Tan & Leong, 2009).
- Supply base reduction (Benton, 2007; Wisner, Tan & Leong, 2009; Thawiwinyu & Laptaned, 2009; Ogden, 2004 and 2006; Robinson, 2006);
- Customer relationship management (Schuster & Dufek, 2004; Wisner, Tan & Leong, 2009; Thompson, 2001; Burt, Dobler & Starling, 2003);
- Impact of organisational communication on purchasing efficiency (Bagraim, Cunningham, Potgieter & Viedge, 2007; Berger, 2008; Manuel & Gupta, 2003; Coyle et al., 2003);
- Systems efficiency (Brenton, 2008; Rodgers, 2007; Thompson, 2001; Tuteja, 2004; Caridi, Cavalieri, Diazzi & Pirovano, 2004; AberdeenGroup, Inc, 2004:13);
- Indirect purchasing competitiveness (Blunck, 2006; Alvarez, Compos & Lasar, 2010); and
- Resistance to change (Swanepoel, Erasmus, Van Wyk & Schenk, 2003; Vales, 2007; Thompson, 2001; Caruth, Middlebrook & Rachel, 2001; Bagraim et al., 2007);

The statements of the questionnaire were anchored to a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. The STATISTICA Version 9.0 (2009) computer software program was used to conduct the statistical analyses in the study.
4.5 THE PILOT STUDY

Collis and Hussey (2003:175) suggest that clear instructions must be provided in the questionnaire by communicating exactly how the researcher would like the respondents to respond. This can be achieved by means of a pilot study, which might highlight items that are difficult to understand. A pilot study helps to refine the questionnaire to ensure that the respondents do not have problems in answering the questions that are presented to them. It thus tests the suitability of the data collection techniques used (Lancaster, 2005:108).

As already mentioned, a questionnaire with close-ended questions anchored on a five-point scale as well as open-ended questions was constructed. The five-point Likert scale was used for the respondents to rate their level of agreement with each given statement. The questionnaire was validated by conducting a pilot study among ten purchasing practitioners who provided feedback on the questionnaire. Improvements were made based on the feedback from the pilot study. The improved questionnaire was used in the actual data collection.

4.6 THE RELIABILITY OF THE MEASURING INSTRUMENTS

A key factor in conducting data collection relates to the quality of the data and determining whether the data are effective relative to a research study. As data tend to vary, it is important to understand the criteria for assessing data quality with respect to reliability and validity (Lancaster, 2005:71). Lancaster (2005:72) refers to the reliability of a measuring instrument as the extent to which it yields consistent results on different occasions and when there are no changes in what is being measured. According to Collis and Hussey (2003:58), reliability is concerned with the findings of the research and is one aspect of testing the credibility of the findings. Collis and Hussey (2003:58) suggest that if a research finding can be repeated, it is reliable.
According to Collis and Hussey (2003:186), the following are three ways of estimating the reliability of responses that are frequently used in research studies:

- The test-retest method is used to determine the extent to which the same instrument yields the same results on two different occasions. The respondents are requested to answer the same questions twice to determine whether their responses will remain unchanged.

- The split-halves method splits the questionnaire or interview record sheets into two equal halves and a correlation of the two data sets is computed.

- The internal consistency method correlates every item with other items across the entire sample to evaluate the extent to which all the items within a single instrument yield similar results.

According to Cook (2009:115), reliability measurement is ideal when the sample size consists of 200 or more people. In cases where the sample size is small, as is the case with the current research study, reliability coefficients for the tests used should be given. Cook (2009, 115) suggests that the Cronbach’s coefficient alpha is an ideal measuring tool when participants respond to questions that are anchored on a Likert scale. Its calculation examines inter-correlations among test items and the closer a Cronbach’s coefficient alpha is to 1.00 the higher the instrument’s internal consistency and reliability. Arnolds and Boshoff (2001, 40) suggest that a Cronbach alpha of 0.50 has been regarded in many research studies as acceptable for basic research and a scale that produces a reliability coefficient of above 0.70, is usually regarded as a reliable instrument.

In the research study, the Cronbach coefficient alpha was used to calculate the internal consistency regarding the reliability of the measuring scales. The first step in the data analysis procedure was to assess the internal reliability of the measuring instruments by means of Cronbach alpha coefficients. The results, reported in Table 4.4, show that all the
instruments returned alpha values of more than 0.50, which are acceptable for basic research (Tharenou, 1993; Pierce and Dunham, 1987).

**TABLE 4.4: CRONBACH ALPHA VALUES OF THE MEASURING INSTRUMENTS**

<table>
<thead>
<tr>
<th>MEASURING INSTRUMENTS</th>
<th>ALPHA VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier relationship management</td>
<td>$\alpha = 0.55$</td>
</tr>
<tr>
<td>Supply base reduction</td>
<td>$\alpha = 0.76$</td>
</tr>
<tr>
<td>Customer relationship management</td>
<td>$\alpha = 0.89$</td>
</tr>
<tr>
<td>Organisational communication</td>
<td>$\alpha = 0.88$</td>
</tr>
<tr>
<td>Systems efficiency</td>
<td>$\alpha = 0.77$</td>
</tr>
<tr>
<td>Indirect purchasing competitiveness</td>
<td>$\alpha = 0.88$</td>
</tr>
<tr>
<td>Resistance to change</td>
<td>$\alpha = 0.71$</td>
</tr>
</tbody>
</table>

**4.7 THE VALIDITY OF THE MEASURING INSTRUMENTS**

Validity is regarded as an important attribute of a measuring instrument with regard to its credibility and relates to the extent to which the research method describes or measures what it is supposed to describe or measure (Lancaster, 2005:70). Evans (2010:339) refers to validity as the extent to which a model represents reality. It can be judged by identifying and examining the assumptions made in a model to establish how they are in agreement.

According to Olivier (2007:62), validity takes various forms which include face validity, content validity, criterion validity and construct validity. Face validity measures the extent to which, on the surface, an instrument looks as though it is measuring a particular characteristic. According to Collis and Hussey (2003:59), face validity ensures that the measures used test or measure what they are supposed to test or measure. Content
validity represents the extent to which a measuring instrument is a representative sample of the content area being measured, while criterion validity represents the extent to which the results of an assessment instrument correlate with one another (Olivier, 2007:62). Construct validity is the extent to which an instrument measures characteristics, which are known as hypothetical constructs, which cannot be directly observed but must instead be inferred from patterns in people’s behaviour (Collis & Hussey, 2003:59). In the present study, content validity was determined on the basis of the literature review by assessing the purchasing practitioners on the questionnaire items. Discriminant validity could not be conducted for the present study due to the size of the sample.

4.8 THE EMPIRICAL RESULTS

The empirical results on the reliability and validity of the measuring instruments indicate that reliable and valid measuring instruments were used in this study. On this basis multiple regression analysis was conducted to statistically investigate the relationships among the determinants (independent variables) and indirect purchasing competitiveness (the dependent variable). The responses to the individual questionnaire statements were also analysed to assess the respondents’ perceptions about industry-related issues pertaining to indirect purchasing. The responses to the open-ended questions were also analysed to qualitatively enrich the quantitative results. The industry-related perceptions and qualitative information are discussed in the next chapter.

4.8.1 Multiple regression analysis

The STATISTICA Version 9.0 (2009) computer software programme was used to test the relationships between indirect purchasing competitiveness (the dependent variable) and its determinants (the independent variables). These relationships include the influence of supplier relationship management, supply base reduction, customer relationship management, organisational communication, systems efficiency and resistance to change on indirect purchasing competitiveness.
The results of the multiple regression analysis are summarised in Table 4.5. The empirical results indicate that the six determinants investigated in this study explain about 70.0 percent ($r^2 = 0.705$) of the variance in indirect purchasing competitiveness (IPC). This means that, although they are not all significant determinants of IPC in this study, all these determinants play a role in achieving IPC with SBR and SYS playing the most important (significant) role.

###TABLE 4.5: MULTIPLE REGRESSION ANALYSIS

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
<th>Std. Err. of Estimate</th>
<th>Std. Err. of b</th>
<th>Std. Err. Of b</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.09247</td>
<td>0.52727</td>
<td>-0.09247</td>
<td>0.52727</td>
<td>-0.17537</td>
<td>0.861863</td>
</tr>
<tr>
<td>SRM</td>
<td>0.057281</td>
<td>0.12117</td>
<td>0.06867</td>
<td>0.145266</td>
<td>0.472719</td>
<td>0.639525</td>
</tr>
<tr>
<td>SBR</td>
<td>0.222598</td>
<td>0.10198</td>
<td>0.210142</td>
<td>0.096278</td>
<td>2.182647</td>
<td>0.036282</td>
</tr>
<tr>
<td>CRM</td>
<td>0.254838</td>
<td>0.16575</td>
<td>0.201787</td>
<td>0.131251</td>
<td>1.537414</td>
<td>0.133726</td>
</tr>
<tr>
<td>COM</td>
<td>0.172632</td>
<td>0.17313</td>
<td>0.136262</td>
<td>0.136661</td>
<td>0.997077</td>
<td>0.325983</td>
</tr>
<tr>
<td>SYS</td>
<td>0.408243</td>
<td>0.12258</td>
<td>0.341081</td>
<td>0.102418</td>
<td>3.330279</td>
<td>0.002145</td>
</tr>
<tr>
<td>RTC</td>
<td>0.07749</td>
<td>0.10470</td>
<td>0.072637</td>
<td>0.098148</td>
<td>0.740077</td>
<td>0.464487</td>
</tr>
</tbody>
</table>

**Note:** P-values in bold indicate a significant relationship.

4.8.1.1 The influence of supplier relationship management (SRM) on indirect purchasing competitiveness

Hypothesis H1 stipulated that supplier relationship management exerts a positive influence on indirect purchasing competitiveness. The null hypothesis formulated in this regard was:

**H01:** Supplier relationship management exerts no influence on indirect purchasing competitiveness.
According to the respondents, supplier relationship management does not exert a significant \( r = 0.06, p > 0.05 \) influence on indirect purchasing competitiveness. The hypothesis H1 is therefore not supported, while the null hypothesis H01 is supported. This means that improving supplier relationship management will not necessarily lead to improved indirect purchasing competitiveness.

4.8.1.2 The influence of supply base reduction (SBR) on indirect purchasing competitiveness

Hypothesis H2 stipulated that supply base reduction exerts a positive influence on indirect purchasing competitiveness. The null hypothesis formulated in this regard was:

\[ \text{H02: Supply base reduction exerts no influence on indirect purchasing competitiveness.} \]

The empirical results indicate that supply base reduction influences indirect purchasing competitiveness significantly \( r = 0.22, p < 0.05 \). Hypothesis H2 is therefore supported, while the null hypothesis H02 is not supported. This means that by improving SBR, managers will increase the competitiveness of indirect purchasing.

4.8.1.3 The influence of customer relationship management (CRM) on indirect purchasing competitiveness

Hypothesis H3 stipulated that customer relationship management exerts a positive influence on indirect purchasing competitiveness. The null hypothesis formulated in this regard was:

\[ \text{H03: Customer relationship management exerts no influence on indirect purchasing competitiveness.} \]

The empirical results indicate that customer relationship management does not influence indirect purchasing competitiveness significantly \( r = 0.25, p > 0.05 \). Hypothesis H3 is
therefore not supported, while the null hypothesis $H_0^3$ is supported. This means that by improving customer relationship management, managers will not increase the competitiveness of indirect purchasing.

4.8.1.4 The influence of organisational communication (COM) on indirect purchasing competitiveness

Hypothesis $H_4$ stipulated that organisational communication exerts a positive influence on indirect purchasing competitiveness. The null hypothesis formulated in this regard was:

$H_{04}$: Organisational communication exerts no influence on indirect purchasing competitiveness.

The empirical results indicate that organisational communication does not influence indirect purchasing competitiveness significantly ($r = 0.17, p > 0.05$). Hypothesis $H_4$ is therefore not supported, while the null hypothesis $H_{04}$ is supported. This means that by improving organisational communication, managers will not increase the competitiveness of indirect purchasing.

4.8.1.5 The influence of systems efficiency (SYS) on indirect purchasing competitiveness

Hypothesis $H_5$ stipulated that systems efficiency exerts a positive influence on indirect purchasing competitiveness. The null hypothesis formulated in this regard was:

$H_{05}$: Systems efficiency exerts no influence on indirect purchasing competitiveness.

The empirical results indicate that systems efficiency influences indirect purchasing competitiveness significantly ($r = 0.40, p < 0.05$). Hypothesis $H_5$ is therefore supported, while the null hypothesis $H_{05}$ is not supported. This means that by improving systems efficiency, managers will increase the competitiveness of indirect purchasing.
4.8.1.6 The influence of resistance to change (RTC) on indirect purchasing competitiveness

Hypothesis H6 stipulated that resistance to change exerts a positive influence on indirect purchasing competitiveness. The null hypothesis formulated in this regard was:

H06: Resistance to change exerts no influence on indirect purchasing competitiveness.

The empirical results indicate that resistance to change does not influence indirect purchasing competitiveness significantly ($r = 0.08, p > 0.05$). Hypothesis H6 is therefore not supported, while the null hypothesis H06 is supported. This means that by improving resistance to change, managers will increase the competitiveness of indirect purchasing competitiveness.

4.9 CHAPTER SUMMARY

In this chapter a brief discussion of the methodology that was used to conduct the research study was provided. It explained the research paradigm, sampling and data collection and provided an explanation of the actual response rate. A multiple regression analysis was conducted to evaluate the relationship between the selected independent variables on the dependent variable.

The results of the multiple regression analysis that are summarised in Table 4.5 indicated that all the independent variables SRM, SBR, CRM, COM, SYS and RTC play a role in achieving indirect purchasing competitiveness, however, they are not all significant in increasing indirect purchasing competitiveness. In other words, an improvement in supply base reduction (SBR) and systems efficiency (SYS) will significantly increase indirect purchasing competitiveness (IPC). The empirical results however show that SRM, CRM, COM and RTC, as measured in this study, do not increase IPC.
The next chapter, Chapter Five, will provide a brief analysis of the descriptive statistics with respect to industry perspectives on the discussed variables.
CHAPTER FIVE

PRESENTATION AND DISCUSSION OF DESCRIPTIVE STATISTICS
RESULTS: INDUSTRY-RELATED PERCEPTIONS

5.1 INTRODUCTION

The primary objective of the study was to determine how the effectiveness and competitiveness of the indirect purchasing function can be increased through a more strategic approach to purchasing. This approach entails adopting SRM, SBR, CRM, COM, SYS and RTC as strategies for increasing indirect purchasing competitiveness. To achieve this objective, the respondents were asked to indicate their levels of agreement about the possible strategies that can be employed by organisations to increase indirect purchasing effectiveness as identified as being important for indirect purchasing competitiveness. The strategies were identified as a result of a literature review.

The responses to individual questionnaire statements were analysed to determine how these strategies are perceived. The Microsoft Excel computer program (MS-Excel, 2003) was used to analyse data. The data analysis consisted of the calculation of the means and medians. All agree and strongly agree responses were combined. The same was done with disagree and strongly disagree in order to make the analysis more meaningful.

5.2 DESCRIPTIVE STATISTICS: INDUSTRY-RELATED PERCEPTIONS

This section provides a synopsis of the responses to Section A of the questionnaire. Table 5.1 to Table 5.7 as well as Figure 5.1 to Figure 5.7 summarise the respondents’ perceptions of the influence of SRM, SBR, CRM, COM, SYS, RTC on increasing indirect purchasing competitiveness. The researcher also set out to investigate how the respondents view indirect purchasing in their departments at their respective organisations. To achieve this, questions were asked relating to the efficiency with which indirect purchasing personnel execute their tasks and meet internal customer demands.
The respondents were asked to rate their levels of agreement with the statements relating to their organisations’ indirect purchasing departments. The responses are summarised in Table 5.8 to Table 5.14.

5.2.1 Supplier relationship management

Figure 5.1 and Table 5.1 depict the responses on how the participants view supplier relations in their respective organisations. Table 5.1 illustrates the average responses by providing results for the means and medians to individual questions. According to Wegner (2003:58), the drawback to using the mean to evaluate average responses is that when the data are skew the mean distorts the result. The median was therefore used to divide data into two equal halves and was included as a measure in this research study to eliminate any distortions that could result from just using the mean.

The analysis of the responses indicates that there is a general agreement that supplier relationship management plays an important role in purchasing. The means achieved on the nine elements which contribute to the effective management of buyer-seller relations covered a range between 2.93 and 3.95, while the medians covered a range of between 2.0 and 4.0. The average mean and median scores of 3.19 and 3.10 respectively indicate that respondents were reasonably satisfied with their supplier relationship management situation.

About seventy-three percent (72.5%) of the respondents reported that buyers and suppliers have easy access to each other. At face value, this is a good finding, as the ease with which suppliers and buyers can reach each other should aid in solidifying their relationships and enhance customer service. However, the empirical results indicate otherwise. Although all parties can easily reach each other, they do not have close relations. This is evidenced by the fact that only 39.3% of the respondents reported that suppliers inform them about crucial matters such as late deliveries, new market trends and new products.
Another element which causes alarm is that 45% of the customers reported that their most important suppliers were not in the Eastern Cape. Access to suppliers could pose problems for these particular customers as they rely on suppliers for deliveries and in cases of emergency, they cannot just drive to the suppliers’ premises to collect materials. The distance might also not allow suppliers to regularly visit customers.

There is evidence of an existing gap in communication between buyers and suppliers and supplier-buyer relationships are not effectively managed. The existing arms length type of relationships could have negative financial implications, as it is vital for purchasing to always know when deliveries will be delayed. Knowing in advance of delays enables purchasing and user areas to make contingency plans to avoid production stoppages that could result from delayed deliveries. As the old adage says, “to be forewarned is to be forearmed”. The results highlight areas which need improvement as they could, in the long run, limit an organisation’s competitiveness.

**FIGURE 5.1: SUPPLIER RELATIONSHIP MANAGEMENT**

Note: Average agree = 40.1%; average neither agree nor disagree = 32.8% and average disagree = 26.4%
TABLE 5.1: DESCRIPTIVE STATISTICS: INDUSTRY-RELATED PERCEPTIONS ON SRM

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>% Agree to strongly agree</th>
<th>% Neither agree nor disagree</th>
<th>% Disagree to strongly disagree</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRM1</td>
<td>My suppliers inform me in advance of late deliveries.</td>
<td>30.0</td>
<td>35.0</td>
<td>35.0</td>
<td>2.98</td>
<td>3.00</td>
</tr>
<tr>
<td>SRM2</td>
<td>My suppliers inform me in advance of new products.</td>
<td>47.5</td>
<td>42.5</td>
<td>10.0</td>
<td>3.45</td>
<td>3.00</td>
</tr>
<tr>
<td>SRM3</td>
<td>My suppliers inform me in advance of price increases.</td>
<td>40.0</td>
<td>40.0</td>
<td>20.0</td>
<td>3.25</td>
<td>3.00</td>
</tr>
<tr>
<td>SRM4</td>
<td>My suppliers inform me in advance of market trends.</td>
<td>30.0</td>
<td>35.0</td>
<td>35.0</td>
<td>2.98</td>
<td>3.00</td>
</tr>
<tr>
<td>SRM5</td>
<td>All my most important suppliers are in the Eastern Cape.</td>
<td>22.5</td>
<td>32.5</td>
<td>45.0</td>
<td>2.65</td>
<td>3.00</td>
</tr>
<tr>
<td>SRM6</td>
<td>I have easy access to suppliers.</td>
<td>75.0</td>
<td>17.5</td>
<td>7.5</td>
<td>3.95</td>
<td>4.00</td>
</tr>
<tr>
<td>SRM7</td>
<td>Suppliers have easy access to me.</td>
<td>70.0</td>
<td>22.5</td>
<td>7.5</td>
<td>3.83</td>
<td>4.00</td>
</tr>
<tr>
<td>SRM8</td>
<td>Suppliers visit us frequently.</td>
<td>40.0</td>
<td>47.5</td>
<td>12.5</td>
<td>3.35</td>
<td>3.00</td>
</tr>
<tr>
<td>SRM9</td>
<td>We visit suppliers frequently.</td>
<td>12.5</td>
<td>22.5</td>
<td>65.0</td>
<td>2.30</td>
<td>2.00</td>
</tr>
</tbody>
</table>

AVERAGE MEAN SCORE = 3.19; AVERAGE MEDIAN SCORE = 3.10

5.2.2 Supply base reduction

The graphical depiction of the results in Figure 5.2 clearly shows that the respondents view customer base reduction as a significant contributor to IPC. Figure 5.2 illustrates that 61.6% of the respondents reported that they view the use of fewer suppliers as more beneficial than the use of many suppliers. A few respondents (15.3%) disagreed with the use of fewer suppliers, while 23.1% neither agree nor disagree on this issue.

Over 70% of the respondents indicated that fewer suppliers are easier to manage; streamlining the supply base creates a good platform for supplier development and ensures better expenditure management. All the benefits highlighted by the respondents
are in line with what the literature advocates and will in the long run impact positively on the bottom line.

Support for supply base reduction is also indicated by the average mean and median scores in Table 5.2. The means achieved on eight of the benefits that the literature advocates as accruable from reducing the number of suppliers that organisations deal with covered a range between 3.08 and 3.88, while the medians covered a range of between 3.0 and 4.0. The reported average means were 3.59 and the medians 3.90 on a 5-point scale. This indicates that the majority of the respondents support supply base reduction.

In summary, the results indicate that there are a myriad of benefits that can be yielded by reducing an organisation’s supply base. The decision to reduce the supply base is subjective and depends on the circumstances surrounding each organisation. It would be beneficial for organisations to evaluate their options carefully.

**FIGURE 5.2: SUPPLY BASE REDUCTION**

![Supply base reduction chart]

- Strongly agree / agree
- % Neither agree nor disagree
- Agree / disagree

Note: Average agree = 61.6%; average neither agree nor disagree = 23.1% and average disagree = 15.3%
TABLE 5.2: DESCRIPTIVE STATISTICS: INDUSTRY-RELATED PERCEPTIONS ON SBR

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>% Agree to strongly agree</th>
<th>% Neither agree nor disagree</th>
<th>% Disagree to strongly disagree</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBR1</td>
<td>It is beneficial to deal with fewer suppliers than many.</td>
<td>65.0</td>
<td>17.5</td>
<td>17.5</td>
<td>3.78</td>
<td>4.00</td>
</tr>
<tr>
<td>SBR2</td>
<td>We reap economies of scale benefits from doing business with fewer suppliers.</td>
<td>57.5</td>
<td>22.5</td>
<td>20.0</td>
<td>3.55</td>
<td>4.00</td>
</tr>
<tr>
<td>SBR3</td>
<td>Dealing with fewer suppliers fosters good cross-organisational relations.</td>
<td>62.5</td>
<td>30.0</td>
<td>7.5</td>
<td>3.70</td>
<td>4.00</td>
</tr>
<tr>
<td>SBR4</td>
<td>We team up with suppliers to initiate and execute continuous improvement strategies.</td>
<td>35.0</td>
<td>42.5</td>
<td>22.5</td>
<td>3.08</td>
<td>3.00</td>
</tr>
<tr>
<td>SBR5</td>
<td>Queries and other supplier-related challenges are easier to handle with fewer suppliers than with many.</td>
<td>80.0</td>
<td>10.0</td>
<td>10.0</td>
<td>3.88</td>
<td>4.00</td>
</tr>
<tr>
<td>SBR6</td>
<td>Dealing with fewer suppliers creates a good platform for supplier development.</td>
<td>70.0</td>
<td>17.5</td>
<td>12.5</td>
<td>3.73</td>
<td>4.00</td>
</tr>
<tr>
<td>SBR7</td>
<td>Supplier development is easier to execute with few suppliers than with many.</td>
<td>62.5</td>
<td>27.5</td>
<td>10.0</td>
<td>3.63</td>
<td>4.00</td>
</tr>
<tr>
<td>SBR8</td>
<td>Reducing the number of suppliers improves expenditure control.</td>
<td>60.0</td>
<td>17.5</td>
<td>22.5</td>
<td>3.43</td>
<td>4.00</td>
</tr>
</tbody>
</table>

AVERAGE MEAN SCORE = 3.59; AVERAGE MEDIAN SCORE = 3.90

5.2.3 Customer relationship management

The statements in this section were aimed at determining how integrated the organisations’ departments are and whether they operate as silos or as corporate units. Figure 5.3 illustrates that most of the respondents displayed confidence in their departments’ ability to support other departments. Eighty-five percent (85.0%) of the respondents indicated that their departments do a good job in supporting other departments. In support of this, 70.0% of the respondents reported that they frequently
communicate with internal customers regarding queries on prices, products and deliveries and they do so transparently.

The statements were also aimed at establishing how the organisations’ departments support each other. Table 5.3 illustrates the responses to CRM-related questions. The means achieved on eight rated factors covered a range between 3.08 and 4.08 and the medians covered a range of between 3.0 and 4.0. They averaged at 3.49 and 3.60 respectively. The overall findings on customer relationship management indicate that there are generally good relations between various departments at the sampled organisations. Most people know what is expected of them in their workplaces.

**FIGURE 5.3: CUSTOMER RELATIONSHIP MANAGEMENT**

My department does a good job in supporting other departments in general.
My department does a good job in keeping abreast with internal customer requirements.
We are always aware of developments in other departments.
My department always knows what other departments expect of it.
My department frequently communicates with internal customers regarding queries (price, product and deliveries).
My department frequently communicates transparently with other departments.
My department frequently works with other departments in cross-functional teams to improve productivity.
My department frequently works with other departments in cross-functional teams to implement cost saving initiatives.

**Note:** Average agree = 55.6%; average neither agree nor disagree = 26.9% and average disagree = 17.5%

The report indicates that cross-functional integration exists in some organisations but it is minimal as only 40.0% of the participants reported that they frequently work in cross-functional teams to improve productivity. The findings indicate that cross-functional
relations need to be improved. The organisations need to investigate whether there are internal factors which hinder cross-functional teamwork and take corrective action.

TABLE 5.3: DESCRIPTIVE STATISTICS: INDUSTRY-RELATED PERCEPTIONS ON CRM

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>% Agree to strongly agree</th>
<th>% Neither agree nor disagree</th>
<th>% Disagree to strongly disagree</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM1</td>
<td>My department does a good job in supporting other departments in general.</td>
<td>85.0</td>
<td>12.5</td>
<td>2.5</td>
<td>4.08</td>
<td>4.00</td>
</tr>
<tr>
<td>CRM2</td>
<td>My department does a good job in keeping abreast of internal customer requirements.</td>
<td>52.5</td>
<td>32.5</td>
<td>15.0</td>
<td>3.45</td>
<td>4.00</td>
</tr>
<tr>
<td>CRM3</td>
<td>We are always aware of developments in other departments.</td>
<td>30.0</td>
<td>37.5</td>
<td>32.5</td>
<td>3.05</td>
<td>3.00</td>
</tr>
<tr>
<td>CRM4</td>
<td>My department always knows what other departments expect of it.</td>
<td>52.5</td>
<td>25.0</td>
<td>22.5</td>
<td>3.33</td>
<td>4.00</td>
</tr>
<tr>
<td>CRM5</td>
<td>My department frequently communicates with internal customers regarding queries (price, product and deliveries)</td>
<td>77.5</td>
<td>10.0</td>
<td>12.5</td>
<td>3.83</td>
<td>4.0</td>
</tr>
<tr>
<td>CRM6</td>
<td>My department frequently communicates transparently with other departments.</td>
<td>62.5</td>
<td>27.5</td>
<td>10.0</td>
<td>3.65</td>
<td>4.00</td>
</tr>
<tr>
<td>CRM7</td>
<td>My department frequently works with other departments in cross-functional teams to improve productivity.</td>
<td>40.0</td>
<td>32.5</td>
<td>27.5</td>
<td>3.18</td>
<td>3.00</td>
</tr>
<tr>
<td>CRM8</td>
<td>My department frequently works with other departments in cross-functional teams to implement cost saving initiatives.</td>
<td>45.0</td>
<td>37.5</td>
<td>17.5</td>
<td>3.38</td>
<td>3.00</td>
</tr>
</tbody>
</table>

AVERAGE MEAN SCORE = 3.49; AVERAGE MEDIAN SCORE = 3.60

5.2.4 Organisational communication

Figure 5.4 and Table 5.4 outline the respondents’ perceptions and the response rate to the questions that were aimed at determining how various organisations communicate and the impact of communication on indirect purchasing competitiveness. According to the
empirical results, there are generally good communication structures in place which are used for departmental, inter-departmental and inter-organisational communication.

The graphical depiction in Figure 5.4 illustrates that over 63.0 percent indicated that they have effective communication in their organisations. About 15.0 percent claimed to have ineffective communication and the rest displayed uncertainty (reflected by neither agree nor disagree statements). The average means of 3.65 and medians of 3.8 on a 5-point scale indicate that most respondents are satisfied with the effectiveness of their organisations.

FIGURE 5.4: ORGANISATIONAL COMMUNICATION

Note: Average agree = 63.6%; average neither agree nor disagree = 21.4% and average disagree = 15.0%

It was indicated by 82.5% of individuals that they view e-mails as the most effective method of external communication. The second most effective form of external communication was reported to be the telephone, which was supported by 72.5%. Face-to
-face communication was regarded as the most effective internal communication method by 70.0%, which is a good thing because feedback is given quicker. Notice board communication was regarded as the least effective method. The good thing about the findings is that open door policies are used effectively in support of the communication structures.

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>% Agree to strongly agree</th>
<th>% Neither agree nor disagree</th>
<th>% Disagree to strongly disagree</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM1</td>
<td>Our face-to-face communication with individuals outside my department is effective.</td>
<td>62.5</td>
<td>25.0</td>
<td>12.5</td>
<td>3.65</td>
<td>4.00</td>
</tr>
<tr>
<td>COM2</td>
<td>Our telephonic communication with individuals outside my department is effective.</td>
<td>72.5</td>
<td>17.5</td>
<td>10.0</td>
<td>3.85</td>
<td>4.00</td>
</tr>
<tr>
<td>COM3</td>
<td>Our face-to-face communication with individuals inside my department is effective.</td>
<td>70.0</td>
<td>20.0</td>
<td>10.0</td>
<td>3.78</td>
<td>4.00</td>
</tr>
<tr>
<td>COM4</td>
<td>Our telephonic communication with individuals inside my department is effective.</td>
<td>67.5</td>
<td>25.0</td>
<td>7.5</td>
<td>3.78</td>
<td>4.00</td>
</tr>
<tr>
<td>COM5</td>
<td>Our notice board memorandum communication with individuals outside my department is effective.</td>
<td>35.0</td>
<td>40.0</td>
<td>25.0</td>
<td>3.15</td>
<td>3.00</td>
</tr>
<tr>
<td>COM6</td>
<td>Our notice board memorandum communication with individuals inside my department is effective.</td>
<td>45.0</td>
<td>32.5</td>
<td>22.5</td>
<td>3.20</td>
<td>3.00</td>
</tr>
<tr>
<td>COM7</td>
<td>Our e-mail communication with individuals outside my department is effective.</td>
<td>82.5</td>
<td>7.5</td>
<td>10.0</td>
<td>4.03</td>
<td>4.00</td>
</tr>
<tr>
<td>COM8</td>
<td>Any system change in my department is well communicated to all concerned.</td>
<td>55.0</td>
<td>25.0</td>
<td>20.0</td>
<td>3.55</td>
<td>4.00</td>
</tr>
<tr>
<td>COM9</td>
<td>Our department has an open door communication policy.</td>
<td>77.5</td>
<td>12.5</td>
<td>10.0</td>
<td>3.93</td>
<td>4.00</td>
</tr>
<tr>
<td>COM10</td>
<td>The open door policy is effectively used in my department.</td>
<td>67.5</td>
<td>12.5</td>
<td>20.0</td>
<td>3.55</td>
<td>4.00</td>
</tr>
</tbody>
</table>

AVERAGE MEAN SCORE = 3.65; AVERAGE MEDIAN SCORE = 3.80
5.2.5 Systems efficiency

Table 4.4 provided a graphical depiction of the systems that are used for purchasing and decision-making at the participants’ organisations. The majority indicated that they use information technology-driven systems such as SAP R3. They were therefore asked to rate their levels of agreement with regard to the efficiency of their organisations’ systems. Their responses are illustrated in Figure 5.5 and Table 5.5.

### TABLE 5.5: DESCRIPTIVE STATISTICS: INDUSTRY-RELATED PERCEPTIONS ON SYS

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>% Agree to strongly agree</th>
<th>% Neither agree nor disagree</th>
<th>% Disagree to strongly disagree</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYS1</td>
<td>I have sufficient knowledge on how the organisation’s purchasing system works.</td>
<td>75.0</td>
<td>12.5</td>
<td>12.5</td>
<td>3.93</td>
<td>4.00</td>
</tr>
<tr>
<td>SYS2</td>
<td>I received training on operating our purchasing system.</td>
<td>62.5</td>
<td>5.0</td>
<td>32.5</td>
<td>3.30</td>
<td>4.00</td>
</tr>
<tr>
<td>SYS3</td>
<td>My organisation’s purchasing system is efficient in providing the necessary reports.</td>
<td>45.0</td>
<td>27.5</td>
<td>27.5</td>
<td>3.20</td>
<td>3.00</td>
</tr>
<tr>
<td>SYS4</td>
<td>My organisation’s purchasing system is efficient in providing information for decision-making.</td>
<td>52.5</td>
<td>30.0</td>
<td>17.5</td>
<td>3.40</td>
<td>4.00</td>
</tr>
<tr>
<td>SYS5</td>
<td>My organisation’s purchasing system fosters good internal control measures.</td>
<td>60.0</td>
<td>32.5</td>
<td>7.5</td>
<td>3.68</td>
<td>4.00</td>
</tr>
<tr>
<td>SYS6</td>
<td>Our suppliers understand how our purchasing system works.</td>
<td>52.5</td>
<td>37.5</td>
<td>10.0</td>
<td>3.53</td>
<td>4.00</td>
</tr>
<tr>
<td>SYS7</td>
<td>Changes to the purchasing system are communicated to all concerned.</td>
<td>62.5</td>
<td>17.5</td>
<td>20.0</td>
<td>3.53</td>
<td>4.00</td>
</tr>
</tbody>
</table>

**AVERAGE MEAN SCORE = 3.51; AVERAGE MEDIAN SCORE = 3.90**

The survey results reveal that most respondents are aware of the systems in their organisations and understand how they operate, as 75.0% reported that they have sufficient knowledge of how their organisations’ purchasing systems operate and only 12.5% reported not knowing how their purchasing systems operate. Some (62.5%)
reported that the training that they had received contributed to their systems knowledge. Efficient systems can only aid in enhancing competitiveness.

The average means and medians of 3.51 and 3.90 respectively indicate that efficient systems are being utilised and participants know how to use them. Systems like SAP and Ariba aid in control and decision-making. However, training should be provided for those who have never been trained to empower them and ensure that everyone performs at their optimal best.

FIGURE 5.5: SYSTEMS EFFICIENCY

Note: Average agree = 59.2%; average neither agree nor disagree = 23.0% and average disagree = 17.8%

5.2.6 Resistance to change

Many times resistance to change becomes a hindrance to change, growth and transformation in organisations. The business environment is constantly changing and in order to remain competitive, organisations find themselves having to adapt their operations in relation to environmental changes such as increased oil or steel prices or
material shortages. As much as most changes are aimed at enhancing profitability, at times people become comfortable with the status quo and refuse to change. The questions were aimed at investigating the participants’ levels of responsiveness to change.

The sampled population indicated that resistance to change is not a hindrance to competitiveness in their organisations. Table 5.6 summarises their perceptions. Figure 5.6 provides a graphical depiction of the responses. The findings on resistance to change indicate that there is flexibility in most organisations and change is embraced. There were 17 participants (43%) who reported that they embrace change by giving disagree ratings to the statements that tended to display a resistance to change.

The findings also highlight change management as an area that requires improvement to ensure that more respondents are open to change and aid the “neither agree nor disagree” respondents in having a clearer stand or perception. The average mean and median scores of 2.79 and 2.7 respectively, which are less than 3, are an indication that the respondents regard themselves as low on resistance to change.

**FIGURE 5.6: RESISTANCE TO CHANGE**

![Graph showing resistance to change]
Note: Average agree = 25.7%, average neither agree nor disagree = 31.1% and
average disagree = 43.2%

TABLE 5.6: DESCRIPTIVE STATISTICS: INDUSTRY-RELATED
PERCEPTIONS ON RTC

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>% Agree to strongly agree</th>
<th>% Neither agree nor disagree</th>
<th>% Disagree to strongly disagree</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC1</td>
<td>In my department, employees find it difficult to change their way of doing things.</td>
<td>22.5</td>
<td>30.0</td>
<td>47.5</td>
<td>2.75</td>
<td>3.00</td>
</tr>
<tr>
<td>RTC2</td>
<td>In my department, employees often resist the implementation of other employees’ ideas.</td>
<td>27.5</td>
<td>37.5</td>
<td>35.0</td>
<td>2.93</td>
<td>3.00</td>
</tr>
<tr>
<td>RTC3</td>
<td>In my department, employees fear change.</td>
<td>25.0</td>
<td>20.0</td>
<td>55.0</td>
<td>2.70</td>
<td>2.00</td>
</tr>
<tr>
<td>RTC4</td>
<td>In my department, employees tend to retain the status quo.</td>
<td>45.0</td>
<td>35.0</td>
<td>20.0</td>
<td>3.33</td>
<td>3.0</td>
</tr>
<tr>
<td>RTC5</td>
<td>In my department, employees have an attitude of “why fix it if it’s not broken?”</td>
<td>25.0</td>
<td>30.0</td>
<td>45.0</td>
<td>2.70</td>
<td>3.00</td>
</tr>
<tr>
<td>RTC6</td>
<td>Innovation is not readily supported by employees in my department.</td>
<td>15.0</td>
<td>32.5</td>
<td>52.5</td>
<td>2.45</td>
<td>2.00</td>
</tr>
<tr>
<td>RTC7</td>
<td>In my department, employees often resist the implementation of new policies.</td>
<td>20.0</td>
<td>32.5</td>
<td>47.5</td>
<td>2.68</td>
<td>3.00</td>
</tr>
</tbody>
</table>

AVERAGE MEAN SCORE = 2.79; AVERAGE MEDIAN SCORE = 2.70

5.2.7 Indirect purchasing competitiveness

In the context of the survey, indirect purchasing competitiveness refers to the efficiency with which indirect purchasing departments execute their tasks and render efficient service to their stakeholders. The individuals who participated in this research study indicated their views of the indirect purchasing departments in their organisations as illustrated in Figure 5.7 and Table 5.7.

The empirical results indicate that they have confidence in their indirect purchasing departments. Most of them (75.0%) indicated that their indirect purchasing departments have knowledgeable buyers. The buyers were also reported to negotiate effectively on
behalf of their organisations by 77.5% of the respondents, while 70.0% complimented them for ensuring continuity of material supply. The average mean of 3.0 and median of 3.70 indicate that the respondents view their indirect purchasing departments as reasonably competitive, but that improvement is necessary. The empirical results indicate that the sampled organisations have reasonably efficient and competitive indirect purchasing departments. Great benefits can be yielded by these organisations through their knowledgeable, well-networked and qualified buyers.

FIGURE 5.7: INDIRECT PURCHASING COMPETITIVENESS

Note: Average agree = 54.4%, average neither agree nor disagree = 29.4% and average disagree = 16.1%
### TABLE 5.7: DESCRIPTIVE STATISTICS: INDUSTRY RELATED PERCEPTIONS ON IPC

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>% Agree to strongly agree</th>
<th>% Neither agree nor disagree</th>
<th>% Disagree to strongly disagree</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPC1</td>
<td>Our indirect purchasing department has knowledgeable buyers.</td>
<td>75.0</td>
<td>17.5</td>
<td>7.5</td>
<td>3.90</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC2</td>
<td>The number of buyers in our indirect purchasing department is adequate.</td>
<td>42.5</td>
<td>15.0</td>
<td>42.5</td>
<td>3.15</td>
<td>3.00</td>
</tr>
<tr>
<td>IPC3</td>
<td>Our indirect purchasing department is effective in maintaining realistic time-frames within which to perform their tasks.</td>
<td>57.5</td>
<td>20.0</td>
<td>22.5</td>
<td>3.35</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC4</td>
<td>The buyers in our indirect purchasing department are up to date with market trends.</td>
<td>57.5</td>
<td>32.5</td>
<td>10.0</td>
<td>3.55</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC5</td>
<td>The buyers in our indirect purchasing department create purchase orders timeously.</td>
<td>60.0</td>
<td>27.5</td>
<td>12.5</td>
<td>3.65</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC6</td>
<td>The buyers in our indirect purchasing department communicate any challenges (e.g. delayed shipments, product obsolescence) timeously.</td>
<td>47.5</td>
<td>40.0</td>
<td>12.5</td>
<td>3.40</td>
<td>3.00</td>
</tr>
<tr>
<td>IPC7</td>
<td>Our indirect purchasing buyers do more than just placing orders.</td>
<td>52.5</td>
<td>32.5</td>
<td>15.0</td>
<td>3.53</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC8</td>
<td>Our indirect purchasing buyers are constructively involved in strategic planning.</td>
<td>22.5</td>
<td>40.0</td>
<td>37.5</td>
<td>2.80</td>
<td>3.00</td>
</tr>
<tr>
<td>IPC9</td>
<td>Our indirect purchasing buyers are effective in ensuring continuity of material supply.</td>
<td>70.0</td>
<td>20.0</td>
<td>10.0</td>
<td>3.73</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC10</td>
<td>Our indirect purchasing buyers are effective in supporting other departments.</td>
<td>67.5</td>
<td>27.5</td>
<td>5.0</td>
<td>3.75</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC11</td>
<td>Our indirect purchasing buyers effectively collaborate with other departments to devise continuous improvement initiatives.</td>
<td>32.5</td>
<td>47.5</td>
<td>20.0</td>
<td>3.20</td>
<td>3.00</td>
</tr>
<tr>
<td>IPC12</td>
<td>Our indirect purchasing buyers negotiate effectively with suppliers to get the best deals for the organisation.</td>
<td>77.5</td>
<td>10.0</td>
<td>12.5</td>
<td>3.88</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC13</td>
<td>Our indirect purchasing department effectively administers contracts on behalf of the organisation.</td>
<td>57.5</td>
<td>20.0</td>
<td>22.5</td>
<td>3.45</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC14</td>
<td>Our department timeously creates purchase requisitions to ensure that there is enough time for sourcing.</td>
<td>40.0</td>
<td>42.5</td>
<td>17.5</td>
<td>3.33</td>
<td>3.00</td>
</tr>
<tr>
<td>IPC15</td>
<td>Our indirect purchasing department effectively acquires all the necessary information required to perform its function.</td>
<td>62.5</td>
<td>35.0</td>
<td>2.5</td>
<td>3.70</td>
<td>4.00</td>
</tr>
<tr>
<td>IPC16</td>
<td>Our indirect purchasing department effectively ensures that requirements on purchase requisitions are always clearly specified.</td>
<td>60.0%</td>
<td>22.5%</td>
<td>17.5%</td>
<td>3.45</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**AVERAGE MEAN SCORE = 3.00; AVERAGE MEDIAN SCORE = 3.70**
As efficient as the indirect purchasing departments are reported to be, they fall short in cross-functional integration, as almost forty percent (37.5%) of the participants indicated that their buyers are seldom involved in strategic planning. Very few (only 32.5%) could vouch that buyers collaborate with other departments to devise continuous improvement strategies. They therefore need to investigate whether there are internal factors which hinder cross-functional collaboration and devise strategies to address them.

5.3 THE QUALITATIVE RESPONSES

The nature of the research study warranted the use of triangulation, which means the use of both the positivistic (quantitative) and phenomenological (qualitative) research methods (Collis & Hussey, 2003:78). The quantitative part of the present study involved the investigation of the relationships between the independent variables and the dependent variable by means of a multiple regression analysis and descriptive (frequency) analysis. Open-ended questions were used to derive qualitative data on ways to improve indirect purchasing competitiveness in firms. The results are discussed below.

5.3.1 Supplier relationship management

As already indicated in Section 5.2.2, relationships between buyers and suppliers are not effectively managed and a communication gap exists. Some of the participants reported that some of their organisations’ payment terms (60 days and more) were not favourable to suppliers. Paying suppliers as late as possible ensures that the buying organisations retain cash for longer, but smaller suppliers end up having to pay interest to their banks. According to them, payment terms need to be improved to yield mutual-benefits for all parties. This should be supported by paying suppliers on time. In so doing, organisations could get better service from suppliers.

It was suggested that a more effective forum of discussion be established, where more supplier meetings are held, during which supplier objectives are clearly set out. During
discussions communication procedures for communicating about late deliveries and price increases should be devised, to give the relationships more structure. It would be beneficial for all parties to clarify purchasing needs, to ensure adequate planning. It would also be beneficial if suppliers were given more detailed specifications regarding the scope of work or requirements that they need to quote on. This will ensure that all suppliers quote on the same specifications and will enable purchasing to do a proper cost analysis and comparison. In other words, purchasing will be able to compare apples with apples. The participants feel that decreasing the supply base should enhance supplier relations and encourage more transparency and buyers should make more effort to visit suppliers and evaluate whether they comply with agreed upon standards. Introduction of a reward system for suppliers should encourage them to perform better.

5.3.2 Supply base reduction

Upon being asked whether organisations should deal with fewer or more suppliers, the majority of respondents indicated that they prefer to deal with fewer suppliers as they are easier to manage and develop. Furthermore, their views are that dealing with fewer suppliers will create and build strong buyer-seller relationships, yield economies of scale benefits through better discounts and leveraged expertise and ensure more effective supplier management and after sales service. The main reasons cited by those who prefer to utilise more suppliers were that it stimulates competition, as price offers tend to be more competitive when more suppliers quote and the development of monopolies is prevented. Although there are risks involved in supply base reduction, the majority contend that the benefits far outweigh the risks.

5.3.3 Customer relationship management

CRM was reported to be an important factor by over half of the respondents; however, it was felt that there are a few things that indirect purchasing should improve on to enhance internal relationships. Communication was reported to be the most important area that
needs improvement. It was also proposed that buyers should communicate more with user areas, provide feedback on pending issues and create purchase orders promptly.

Furthermore, there should be an open door policy and a constant flow of communication on updates regarding the systems and current work loads. The respondents felt that purchasing should become more involved with user areas and be involved from the beginning of projects to ensure that all departments support each other and decisions are unanimously made. Therefore, it was suggested that more meetings be held to clarify purchasing processes, lead times for products organisational objectives, departmental needs and purchasing objectives.

5.3.4 Organisational communication

Organisational communication was identified as a contributor to indirect purchasing competitiveness. Some respondents indicated that their organisations have effective tools and structures in place but they were not adequately utilised. To improve organisational communication, it was suggested that effective communication tools such as e-mail, telephone correspondence to suppliers and face-to-face discussions be used. The importance of communicating each department’s annual operating plan stipulating its needs and expected levels of service delivery at the beginning of the year was highlighted as an important improvement strategy. Conducting regular cross-functional team projects and monthly internal customer meetings to discuss issues and concerns openly should enhance communication and break cross-functional barriers. Most reported that they communicate mostly through e-mails. One respondent showed vehement opposition to this by suggesting there should be more “Talk, talk and more talk. Do not play “e-mail tennis”, as it is not good communication”. Therefore face-to-face communication should be used more.

5.3.5 Systems efficiency

Systems efficiency was rated among the top contributors to indirect purchasing efficiency. Most respondents indicated that they know how their systems operate, but
they felt that more SAP navigation training and other computer skills training should be provided. Some of the users whose organisations operate on the Ariba and SAP platform felt that it was cumbersome to work from two platforms and suggested the use of just one.

### 5.3.6 Indirect purchasing competitiveness

The indirect purchasing departments at the selected organisations were reported to be efficient and participants displayed confidence in them. The participants were asked what they think needs to change in indirect purchasing to improve efficiency and competitiveness. It was suggested that managers need to provide more support to employees, boost their morale, lead by example and not have double standards. Early involvement, clear definition of requirements and flexibility by user departments will likely give purchasing enough room to effectively improve their efficiency and competitiveness. There should be better preparation for tendering, in terms of providing purchasing with a clear scope of work to ensure all quotations are at the same level. It was also suggested that departments should work as one and not be individualistic; therefore cross-functional teams should be formed to ensure integration.

### 5.3.7 Resistance to change

Most of the respondents indicated that their organisations manage change effectively. The main reasons they cited for resistance to change were that people resist change due to the fear of the unknown, fear of losing benefits, lack of understanding and generally being too busy to implement new things.

### 5.4 CHAPTER SUMMARY

The empirical results were analysed and reported in this chapter. More specifically, it analysed the data obtained from the questionnaires that were distributed to 40 supply chain practitioners in the Nelson Mandela Metropole. The responses to the individual
questionnaire statements were analysed to assess the respondents’ perceptions about industry-related issues pertaining to indirect purchasing. It focused on questions relating to strategies for increasing indirect purchasing competitiveness in order to determine whether SRM, SBR, CRM, COM, SYS and RTC increase indirect purchasing competitiveness.

According to the results of the descriptive statistical data on industry related perceptions, the participants appear to be reasonably satisfied with their performance, particularly in supply base reduction, organisational communication and systems efficiency. However SBR and SYS yielded the highest medians and the multiple regression analysis indicated that an increase in the two variables will significantly increase indirect purchasing competitiveness.

In the next chapter, Chapter Six, the managerial implications of the empirical findings are discussed. Chapter Six also presents conclusions and recommendations.
CHAPTER 6
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

In this final chapter, the empirical findings of the study are discussed in terms of the managerial implications that they present. The results are compared with previous research findings in the literature and conclusions are drawn from these comparisons. Recommendations about potential future research that can be conducted to build upon this research study are also made.

6.2 ANALYSIS OF RESEARCH FINDINGS

In Chapter Three, sections 3.3.1 to 3.3.7 highlighted SRM, SBR, CRM, SYS, COM and RTC as strategies that can be employed by organisations to improve effectiveness and increase competitiveness in indirect purchasing. This section evaluates the results that were derived from the regression analysis and the descriptive statistical analysis for each variable in relation to the literature.

6.2.1 Supplier relationship management (SRM)

The literature review in Chapter Three revealed that SRM fosters cross-organisational integration and collaboration which in turn yield close mutually-beneficial relationships between buyer and seller organisations, which invariably increase indirect purchasing competitiveness (Mahoney & Stroller, 2009:2; Humphreys et al., 2008:329). The research investigated the relationships between the selected organisations and their suppliers.

The results of the average mean score of 3.19 and the average median of 3.10 as outlined in Table 4.1 led to the conclusion that the respondents are of the opinion that supplier relationship management makes a fair contribution towards the achievement of indirect
purchasing competitiveness. The findings however highlighted that supplier-buyer relationships are not effectively managed. Although the suppliers have easy access to the customers, the easy access is not utilised adequately. This indicates an that there is an underlying communication gap. The reason for the communication gap and inadequate use of supply chain access could be that there is a lack of structure in the buyer-supplier relationships. The unstructured relationships among the parties involved could mean that objectives are not clearly outlined and therefore suppliers do as they please.

The findings indicate that there is an element of re-activeness among the buyers and suppliers. Suppliers display negligence by not delivering on time and not communicating about it. On the other hand, buyers should have monitoring systems in place to ensure efficiency, which include reports for expediting on orders. All the above-mentioned problems put buying organisations at a risk of incurring production stoppages which in turn could negatively impact on the bottom line as firms pass the financial burden on to their customers. Furthermore, should buying companies fail to meet their production targets and customer demands, their company names could be negatively impacted (Naude, 2009:193).

Therefore, to remain competitive, organisations need to devise strategies to improve relations between buying and supplying organisations. Relations with suppliers can be improved by managing the buyer-seller relationships more effectively and by pursuing closer relationships with their key suppliers and seeking mutual advantages (Van Zyl, 2005:57; Moeller et al., 2006:70). It would benefit organisations if they entered into strategic partnerships with their suppliers, particularly those that supply critical parts. Critical parts are those parts or materials whose shortage could halt production and cause a company to lose a substantial amount of money in lost sales.

The finding that some of the organisations’ most important suppliers are not in the Eastern Cape should be addressed, as the supplier proximity challenge could be a contributor to the highlighted communication gap and poor relations. Furthermore, the impact of late deliveries could have severe financial implications when suppliers are far
away. Organisations could have production line or plant stoppages or incur high airfreight charges. To mitigate any supply problems that could be encountered as a result of location, organisations should consider devising and implementing localisation strategies that are aimed at continuity of supply. Alternatively, consignment stock agreements, at fixed prices for a certain period, can be entered into by the buying and supplying organisations. The benefit of consignment stock agreements is that they ensure continuity of material supply for the buying organisation and reduce their inventory costs, as a consignment is only paid for upon consumption.

Suppliers and customers should capitalise on the easy access to each other through frequent visits, during which pertinent factors such as price increases and late deliveries can be discussed. A platform should be developed to enable honest exchange of information and ideas whereby rules are set for success of the business relationship. In the event of delayed deliveries, suppliers must proactively inform the buying organisations on time and where possible assist in implementing contingency plans.

Campelo and Wolffried (2007:106) suggest that indirect purchases can be better managed by means of electronic purchasing solutions. The selected organisations indicated that they already have systems such as SAP R3 which provide real time information, but these do not appear to be fully utilised and the organisations need to remedy this by electronically synchronising their systems to better manage their operations. This should enable them to see what is happening in each other’s businesses, pick up potential problems and proactively make contingency plans.

In addition, organisations can improve SRM by introducing, outlining and formalising the supplier key performance indicators (KPI). This will clarify the buying organisations’ expectations of the suppliers, aid in setting supplier objectives and provide metrics against which suppliers can be measured. It will also strengthen relations, develop trust among buyers and suppliers as well as enable organisations to share valuable information, devote time and resources to understand each other’s business and create goodwill.
In addition to reducing operational cost and improving the bottom-line, the fundamental goal of developing and maintaining good relationships with suppliers is to ensure that continuous improvement strategies are devised and implemented in order to set the organisations apart from competitors. The success of such initiatives should therefore be rewarded by introducing incentive schemes such as “the supplier of the year awards”.

6.2.2 Supply base reduction (SBR)

In Section 3.4.2 it has already been mentioned that in addition to supplier relationship management, the shift in market trends, changing buyer patterns and the growing need to maintain reliable supply networks have driven organisations into devising strategies to better manage their supply base (Wisner et al., 2009:514). According to Thawiwinyu & Laptaned (2009:11), supply base reduction policies have a positive impact on business operations as they narrow down the number of suppliers to those who best meet organisational requirements.

The empirical results reveal that the majority of respondents support the claim that supply base reduction is a strategic tool for increasing efficiency and competitiveness. They use supply base reduction as a strategic tool for managing supplier relations, which is in line with the literature. All the benefits highlighted by the respondents are in line with what the literature advocates and will in the long run impact positively on the selected organisations’ bottom line.

In order to reap the optimal benefits that can be afforded by supply base reduction, organisations need to work at improving cross-organisational integration. Only a few respondents reported to have been involved in cross-organisational team initiatives that were aimed at implementing continuous improvement strategies. This is tantamount to lost opportunities in cost savings that could have resulted from such initiatives.

According to Ogden (2004:1), it is more beneficial to deal with fewer suppliers than many, as it enhances efficiency, as supply base reduction encourages transparency, which
ensures that there are open lines of communication between the buying organisation’s buyers and suppliers. The organisations will therefore be able to tap into each other’s technology, manage their supply bases more efficiently as they will be easier to manage and monitor and buyers will deal with fewer suppliers and thus tailor supplier development efforts to fewer suppliers for maximum resource allocation (Ogden, 2006:4).

While supply base reduction yields a myriad of benefits, organisations must be wary of risks such as a key supplier being liquidated and how that would impact on operations. Organisations should also guard against the development of monopolies, as monopolies are subject to abuse (Robinson, 2006).

6.2.3 Customer relationship management (CRM)

In the context of purchasing, CRM is viewed as the development and maintenance of relationships with stakeholders and fosters cross-functional teamwork. CRM is used to optimise purchasing effectiveness by creating an interface between purchasing and other departments such as production, marketing, maintenance, human resources and finance (Burt et al., 2003:106). Cross-functional teams as illustrated in Figure 3.2, in relation to CRM enable organisations to improve overall profitability and enhance product quality as professionals from various departments combine their knowledge and skills for the good of the organisation.

The findings reveal that there are generally good relations between indirect purchasing departments and various departments at the selected organisations. The fact that only a small margin has been exposed to working in cross-functional teams to improve productivity, leads to the conclusion that the departments in the selected organisations, to a certain extent work in silos. If that were not the case then the rating for cross-functional collaboration would have been higher. The impact of the lack of integration on the organisations is that the benefits of cross-functional teamwork are being missed out on as each department simply pursues its own objectives, which in some cases could be in
conflict with each other. This directly contradicts Benton (2007:33) in his view that business unit objectives should be linked to form a unified organisational strategy.

Against the background of the findings, it is clear that the indirect purchasing departments under investigation need to improve their relations with their customers and drive cross-functional continuous improvement projects. According to Van Zyl (2003:3), CRM does contribute to efficiency and competitiveness, and knowing what customers require aids in meeting their specific needs. It is therefore recommended that the involved organisations begin by first developing an indirect purchasing vision and direction, focusing on increasing their capabilities. They can form sourcing teams, which include individuals from various business units who combine their respective skills to ensure that their organisations have a competitive advantage.

Formal stakeholder partnerships should be formed, whereby weekly strategic meetings provide a platform for problem solving and ideas sharing. These meetings can be used by purchasing to clearly outline the purchasing process, its objectives and expectations. It was reported that, at times, user areas tend to create purchase requisitions on the same day that they expect delivery not taking into consideration that requisitions have to be approved by management. In such instances, the buyers get blamed for late deliveries. Realistic lead times can be discussed and mutually decided upon at the meetings (Jaeckle, 2006:1).

6.2.4 Organisational communication (COM)

Chapter Three has already mentioned that effective communication is crucial for organisational performance and productivity, as no group can function without effective and adequate communication systems. Effective and adequate communication systems ensure that policies are transmitted, enable team spirit and cooperation to be built and strategic direction to be given to employees (Bagraim et al., 162). The selected organisations support suggestions in this regard in the literature and have good and effective communication structures in place.
The findings regarding the preferred methods of communication among the organisations lead to the conclusion that the busyness of the modern-day business person has led to the rise in cyber communication and individuals have become too busy for one-on-one discussions, as most people prefer e-mail communication and phone calls or teleconferences. The negative impact of this is that receiving feedback on issues through e-mail takes longer than with face-to-face discussions. Furthermore, written communication can be easily misunderstood, as the intention of the written message can be lost in translation. E-mails do not fully support the principles of relationship building. It is however commendable that the open door policy is supported and effective at the investigated organisations.

Departmental and inter-departmental communication is crucial for relationship building, aids in developing organisational capabilities, and helps individuals and groups to coordinate activities and achieve goals. Therefore organisations should ensure that communication lines are always open to avoid potentially costly problems and enhance productivity (Bagraim et al., 2007:164; Berger, 2008:2). As the organisations reported that organisational communication plays a role in enhancing competitiveness, it should be adequately used to support SRM and SBR efforts.

To ensure that the level of organisational communication is maintained or improved, it is recommended that organisations intentionally create forums for internal and external face-to-face discussions to foster information sharing, relationship creation and set clear objectives. The organisations should utilise their open door policies more, have regular operations meetings where monthly strategies are devised, issues are discussed and resolved and ideas are shared. Such structures should clarify where each department and individual fits into the overall business strategy, while a shared vision will develop. They should also enable the development of cross-functional teams and allow for any unclear matters to be clarified.
6.2.5 Systems efficiency (SYS)

Organisations find themselves under constant pressure to remain profitable, while reducing costs and improving product and service performance in an increasingly competitive global marketplace. Due to the growing need for organisations to coordinate purchasing with other functional areas and suppliers to ensure product, process and quality success, organisations are increasingly investing in information systems to support this coordination (Hemsworth, Sañchez-Rodríguez, & Bidgood, 2008:1).

Efficient information systems are considered to be an integral source of competitive advantage and business success. Tuteja (2004:2) suggests that efficient systems are those which provide decision-making information, are easy to operate and enable indirect purchases to be automated, thereby eliminating time consuming manual operations. It is commendable that most of the selected organisations have efficient systems in place and most use SAP R3. Efficient information systems act almost like glue which holds organisations together, as systems such as SAP enable organisational productivity and profitability. The information that is made available can be useful to those knowledgeable users for trend analysis, as SAP captures every transaction. Supplier performance with respect to prices and on-time delivery can be easily monitored.

Buyers in particular can run reports by category and devise cost saving strategies from the data analysis. SAP reports could provide opportunities for expenditure aggregation, particularly where similar commodities are bought from different suppliers. Expenditure aggregation yields economies of scale benefits through volume discounts (Burt et al., 2003:20).

Efficient systems at the organisations’ disposal can be used by cross-functional teams to plan production requirements, identify which supplier to keep or eliminate, which in turn enables purchasing to determine material requirements and source accordingly. There is however room for improvement. Having adequate systems in place is not the same as using those systems adequately. The need for improvement is highlighted by 45.0% of
the users who reported that their organisation’s purchasing systems are efficient in providing the necessary reports and just over 52.0% who reported that their purchasing systems provide them with information for decision-making. One can deduce that the reason why the figures are not big is that some users are unable to navigate their systems properly and have probably not been made aware of all the systems’ capabilities. Therefore, organisations need to train and re-train their employees to ensure that they can navigate their systems.

6.2.6 Resistance to change (RTC)

In today’s turbulent business environment, a key success factor and competitive advantage is the ability to keep up with the pace of change and navigate it effectively. Environmental changes in organisations, whether they are internal or external, could impact on the conditions under which employees operate (Cook, 2009:8). Changes could include systems changes, or structural and policy changes. According to Thompson (2001: 861), from time to time organisations and functional teams have to deal with technological, product, administrative, structural and attitude changes. Most changes are implemented to improve product quality, service quality or the production process.

The findings regarding the sampled organisations’ responsiveness to change indicate that the sampled population consisted of more people who were open to change than those who were not. This leads one to deduce that most of the respondents are flexible. These are good traits, as the business environment is constantly changing, which means that employees need to be proactive, flexible and innovative enough to stay ahead of competitors in order to maintain a competitive advantage.

As much as the mean scores indicated that resistance to change is not a factor at the selected organisations, there does, however, appear to be a tendency to resist change in some, as nearly half of the participants reported that they prefer to retain the status quo. This means that they prefer things not to change, neither for better nor for worse but to remain the same. This poses a problem as the business world is constantly evolving and
since indirect purchasing competitiveness partially depends on people, they need to be prepared to change or else their organisations will risk being overtaken by competitors and thus lose market share.

The existing resistance to change can be mitigated by developing organisational change and innovation programmes which are aimed at ensuring increased response to customer needs, and increased productivity and efficiency through employee involvement. This entails developing flexible organisational and management strategies and adapting to environmental changes. Developing such organisational change and innovation programmes would ensure efficiency and prevent complacency, as employees would learn to be more adaptable and flexible. Implementing strategies for mitigating resistance to change will go a long way toward ensuring that more respondents are open to change and providing the “neither agree nor disagree” respondents with a clearer stand or perception (Bagraim et al., 2007:374).

6.2.7 Indirect purchasing competitiveness (IPC)

The findings that the selected indirect purchasing departments provide good service to their internal customers are a good indication that the organisations have efficient processes in place. It can be concluded that they also have the right people in place to create an interface between the buying and selling organisations. As it is the role of purchasing to act as an intermediary between suppliers and internal customers, these departments were rated well on business acumen and creating the right interface between stakeholders and suppliers (Stevenson, 2002:529).

According to Alvarez, Compos and Lasar (2010:2), for firms to increase indirect purchasing competitiveness and optimise efficiency, emphasis should be placed on managing the total cost of ownership and supply base reduction, partnering with suppliers, and embarking on fact-based negotiations. In this regard, according to the empirical results, the investigated departments are already adhering to what is proposed
in the literature. They therefore need to continually seek improvement strategies and thus remain competitive.

Cross-functional integration is one area that all the organisations need to work on to leverage cross-functional expertise and increase productivity through cross-functional teamwork. They should implement CRM strategies to enhance relationships with other departments and drive integration and teamwork by being involved at the inception of new projects. This will enhance collaboration and develop cross-functional teams whereby inter-departmental expertise can be shared, while departments work together as one towards the achievement of common goals. Ultimately, these common goals are to enhance profitability, increase market share and be more competitive.

6.3 CHAPTER SUMMARY

Against the background of the literature and the empirical results, it can be concluded that supply base reduction, supplier relationship management, customer relationship management, organisational communication, systems efficiency and the effective management of resistance to change are strategic tools for enhancing indirect purchasing competitiveness. In this regard, supplier relationship management enhances indirect purchasing competitiveness by encouraging the development of more structured relationships with suppliers and efficiently managing those relationships. SRM ensures transparent communication exists between suppliers and buyers, whereby parties combine their knowledge and skills and devise continuous improvement strategies.

SRM works hand in hand with SBR, which focuses on long-term involvement with suppliers. SBR encourages the reduction of the number of suppliers with which organisations do business and enables them to enter into mutually-beneficial strategic partnerships with key suppliers. CRM as a strategy for enhancing indirect purchasing competitiveness is also based on relationship building. It encourages the eradication of silo operations, by fostering cross-functional integration and cohesion by encouraging departments to work together as one towards the achievement of common goals.
Ultimately, these common goals are to enhance profitability, increase market share and be more competitive.

SRM, SBR, CRM are supported by organisational communication (COM) and systems efficiency (SYS). Effective and adequate communication systems ensure that policies are transmitted, enable team spirit and cooperation to be built and strategic direction to be given to employees and thus enhance competitiveness. Systems efficiency increases competitiveness by aiding organisations to coordinate purchasing with other functional areas and suppliers to ensure product, process and quality success. The effective management of the implementation of these strategies entails ensuring that there is stakeholder buy in so as to prevent resistance to change.

The results of the multiple regression analysis and the descriptive statistical analysis revealed that, of all the above-mentioned strategies, the most important ones according to the sampled respondents are supply base reduction and systems efficiency. The multiple regression results in Table 4.1 indicated that the six outlined determinants of indirect purchasing competitiveness explain about 70 percent of the variance in direct purchasing competitiveness. The descriptive statistical analysis in Section 5 also presented the respondents’ views as indicated by the average mean and median scores of 3.59 and 3.90 for SBR and 3.51 and 3.9 for SYS. Other variables yielded respective average mean and median scores of 3.65 and 3.80 for COM; 3.49 and 3.60 for CRM and 2.79 and 2.70 for RTC. An analysis of the respondents’ general views of the competitiveness of their indirect purchasing departments yielded respective average mean and median scores of 3.00 and 3.70.

Problem areas that were identified in the study were communication, and cross-functional and cross-organisational integration. Regarding SRM, relations between buyer and supplier organisations need to be more effectively managed by visiting each other frequently. Strategic issues such as upcoming projects and price increases should be discussed during those visits and the visits should be used as a platform for cross-organisational integration, whereby parties can brainstorm about continuous
improvement initiatives. Localisation strategies should be devised to ensure that most suppliers are in close proximity to their customers. Such strategies should include local supplier development, finding new suppliers and entering into consignment stock agreements with existing suppliers. With respect to SBR, the results indicated that the sampled respondents showed adequate support thereof, although there were concerns about the potential development of monopolies. Structures will need to be put in place to ensure this does not happen; SBR is meant to yield better economies of scale benefits.

It was reported that stakeholders are not always aware of developments in other departments and that there have been minimal cross-functional projects. CRM problems need to be addressed by ensuring that there is more open and frequent communication between departments. Weekly or monthly operation meetings should be introduced for information and ideas sharing. Such meetings will also serve to build cross-functional teams and integrate various functional areas. Where Systems efficiency (SYS) is concerned, training needs to be provided for those who have never received any formal training, as it will enable them to make optimum use of their systems.

All the mentioned factors involve changing the way things are done, including mindsets. All changes need to be effectively communicated to employees to ensure buy in from everyone. In this regard, organisations should make use of more face-to-face communication so as to avoid any confusion and resistance. Therefore, organisations need to make sure that they have change and innovation programmes in place that will ensure that employees are adaptable and more open to change. Such programmes ensure effective change management and minimise resistance to change.

The study also identified problem areas in indirect purchasing that need improvement, such as the inadequate number of buyers that some organisations have; the lack of buyer involvement in strategic planning; lack of buyer involvement in continuous improvement initiatives with other departments and some reported delays in purchase order creation. Recommendations on how to improve indirect purchasing include employing more buyers to ensure that existing ones can perform at their optimal best and focus on the core
function of strategic purchasing. Alternatively, organisations could outsource the purchase of some low value items or use an automatic ordering system to free up the buyers’ time for more strategic matters. Buyers should be more involved with user areas early in the year to plan the year and determine how departments can support each other. This should foster cross-functional integration and create a platform for strategic planning. Strategic planning should however be addressed at director level, whereby all directors work together to devise operating plans, and involve buyers in the process. Implementing SRM, SBR, making effective use of organisational communication and organisational information systems will go a long way towards integrating departments, enhancing relations, minimising resistance to any proposed changes and will invariably increase competitiveness. Organisations will therefore yield great benefits from paying attention to these findings.

Although the study has made an important contribution to the improvement of indirect purchasing competitiveness, there are areas that that could be improved in future research. One such area is the sample size. In view of the small sample size (40 respondents) used in the present study, the issue of generalisability to all indirect purchasing practitioners could be in question. Also, the study focused only on indirect purchasing practitioners in manufacturing firms in the Nelson Mandela Metropolis. It is therefore recommended that a similar study be done on a larger sample in other industries and in other geographical areas in South Africa. Because of the small sample size, the discriminate validity of the measuring instruments could not be assessed. This is another reason why the study should be replicated on a larger sample.
LIST OF REFERENCES


Cook, G.T. 2009. Key factors required to be classified as a world-class supplier from a South African automotive industry perspective. Nelson Mandela Metropolitan University.


Olivier, C. 2007. A proposed strategy for the implementation of total productive maintenance at continental tyre South Africa. Nelson Mandela Metropolitan University.


SAP AG. 2006. *Mysap™ Supplier relationship management for the automotive industry*


Smith, V., Goel, S. & Gulhane, T. 2007. Enabling profitable growth through procurement: transforming the sourcing and procurement organization. SAP AG.


Telgen, J. & Pop-Sitar, C. 2001. Possible kinds of values added by the purchasing department. The 10th International Annual IPSERA Conference.


ANNEXURE 1: THE QUESTIONNAIRE COVERING LETTER

Dear Respondent

I am a post-graduate student studying towards my MBA (Masters in Business Administration) at the Nelson Mandela Metropolitan University Business School. The topic of my research project involves an investigation of the factors that impact the competitiveness of indirect purchasing divisions in firms in the Nelson Mandela Bay. We believe that this study would make a contribution to increasing the competitiveness and profitability of these firms. The empirical results of the study will be made available to the participants on request.

You are part of our selected sample of respondents whose views we seek on the above-mentioned matter. We would therefore appreciate it if you could answer a few questions in this regard, which should not take more than twenty minutes of your time. Please note that the information gathered will not be used against any organisation in any way and that all your responses will be strictly confidential. Please return the completed questionnaire by the 15th October 2010. We thank you in advance for your highly appreciated contribution towards this study.

There are no correct or incorrect answers. Please answer the questions as accurately as possible. For each statement, tick the number which best describes your experience. For example, if you strongly agree with the statement, tick the number 5. If you strongly disagree with the statement, tick the number 1. **Tick only one answer for each statement, but answer ALL QUESTIONS please.**

Thank you very much.

Miss G. Makubalo
Research supervisor: Prof CA Arnolds (Tel. 041-5043825)
ANNEXURE 2: THE MEASURING INSTRUMENTS

SUPPLIER RELATIONSHIP MANAGEMENT
My suppliers inform me in advance of late deliveries.
My suppliers inform me in advance of new products.
My suppliers inform me in advance of price increases.
My suppliers inform me in advance of market trends.
All my most important suppliers are in the Eastern Cape.
I have easy access to suppliers.
Suppliers have easy access to me.
Suppliers visit us frequently.
We visit suppliers frequently.

SUPPLY BASE REDUCTION
It is beneficial to deal with fewer suppliers rather than many.
We reap economies of scale benefits from doing business with fewer suppliers.
Dealing with fewer suppliers fosters good cross-organisational relations.
We team up with suppliers to initiate and execute continuous improvement strategies.
Queries and other supplier-related challenges are easier to handle with fewer suppliers
than with many.
Dealing with fewer suppliers creates a good platform for supplier development.
Supplier development is easier to execute with few suppliers than with many.
Reducing the number of suppliers improves the control of expenditure.

CUSTOMER RELATIONSHIP MANAGEMENT
My department does a good job in supporting other departments in general.
My department does a good job in keeping abreast of internal customer requirements.
We are always aware of developments in other departments.
My department always knows what other departments expect of it.
My department frequently communicates with internal customers regarding queries
(price, product and deliveries).
My department frequently communicates transparently with other departments.  
My department frequently works with other departments in cross-functional teams to improve productivity.  
My department frequently works with other departments in cross-functional teams to implement cost saving initiatives.

**ORGANISATIONAL COMMUNICATION**

Our face-to-face communication with individuals outside my department is effective.  
Our telephonic communication with individuals outside my department is effective.  
Our face-to-face communication with individuals inside my department is effective.  
Our telephonic communication with individuals inside my department is effective.  
Our notice board memorandum communication with individuals outside my department is effective.  
Our notice board memorandum communication with individuals inside my department is effective.  
Our e-mail communication with individuals outside my department is effective.  
Any system change in my department is well communicated to all concerned.  
Our department has an open door communication policy.  
The open door policy is effectively used in my department.

**SYSTEMS EFFICIENCY**

I have sufficient knowledge on how the organisation’s purchasing system works.  
I received training on operating our purchasing system.  
My organisation’s purchasing system is efficient in providing the necessary reports.  
My organisation’s purchasing system is efficient in providing information for decision-making.  
My organisation’s purchasing system fosters good internal control measures.  
Our suppliers understand how our purchasing system works.  
Changes to the purchasing system are communicated to all concerned.
RESISTANCE TO CHANGE
In my department, employees find it difficult to change their way of doing things.
In my department, employees often resist the implementation of other employees’ ideas.
In my department, employees fear change.
In my department, employees tend to retain the status quo.
In my department, employees have an attitude of “why fix it if it’s not broken?”
Innovation is not readily supported by employees in my department.
In my department, employees often resist the implementation of new policies.

INDIRECT PURCHASING COMPETITIVENESS
Our indirect purchasing department has knowledgeable buyers.
The number of buyers in our indirect purchasing department is adequate.
Our indirect purchasing department is effective in maintaining realistic time-frames within which to perform their tasks.
The buyers in our indirect purchasing department are up to date with market trends.
The buyers in our indirect purchasing department create purchase orders timeously.
The buyers in our indirect purchasing department communicate any challenges (e.g. delayed shipments, product obsolescence) timeously.
Our indirect purchasing buyers do more than just placing orders.
Our indirect purchasing buyers are constructively involved in strategic planning.
Our indirect purchasing buyers are effective in ensuring continuity of material supply.
Our indirect purchasing buyers are effective in supporting other departments.
Our indirect purchasing buyers effectively collaborate with other departments to devise continuous improvement initiatives.
Our indirect purchasing buyers negotiate effectively with suppliers to get the best deals for the organisation.
Our indirect purchasing department effectively administers contracts on behalf of the organisation.
Our department timeously creates purchase requisitions to ensure that there is enough time for sourcing.
Our indirect purchasing department effectively acquires all the necessary information required to perform its function.

Our indirect purchasing department effectively ensures that requirements on purchase requisitions are always clearly specified.