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# VALUE CREATION THROUGH STRATEGIC COST MANAGEMENT ALONG THE SUPPLY CHAIN



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# DECLARATION

I hereby declare that this thesis is the product of my own work, both in concept and execution. It has not been submitted in the past, or is being, or is to be submitted, in whole, or part thereof, for a degree at this University or at any other institution.

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Signature..... Date .....

# DEDICATION

This thesis is dedicated to the most wonderful people that I have had the privilege of knowing, my late parents, Sailas and Enereta. Your love, support, encouragement and teaching inspired me from a young age to work hard and remain focused.

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# ABSTRACT

The strategic importance of supply chain management in creating value (by way of cost reductions and improved profitability, for instance) is beginning to attract the attention of both practitioners and academics. Furthermore, the potential of strategic cost management to support inter-company supply chain value creation, has been highlighted by a number of researchers. However, it appears that little research has been done to investigate the application of strategic cost management concepts and instruments along the supply chain. The purpose of this research was to contribute to the understanding of the link between the two, by investigating the application of strategic cost management techniques and practices, and the extent to which this supports value creation along a product's supply chain.

Empirical data was gathered in the South African retail industry using a multiple research design (both a survey and case study methods were used). The survey focused on establishing the supply chain management practices in the South African retail industry, so as to understand the context in which strategic cost management is being applied. The data gathered using a questionnaire were analysed using the calculation of means, to establish the importance that was attached to variables of interest. The case studies, which provided insights via interviews, personal observation and the perusal of relevant company documents, facilitated an in-depth understanding of the way value is being defined and created along the supply chain through the support of strategic cost management techniques and practices. Data gathered through interviews were analysed using a qualitative analytical protocol and the pattern of behaviour approach.

The research revealed that strategic cost management supports value creation through the application of management accounting techniques and practices such as target and kaizen costing, balanced scorecard, total quality management, just-in-time, life cycle costing, open book policy and activity-based costing/management. These techniques and practices are applied in the context of an array of other organisational approaches that facilitate value creation, particularly supply chain management strategic alliance processes such as

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partnership creation, maintenance and evaluation. Thus strategic cost management, through the application of management accounting techniques and practices is part of a plethora of approaches that facilitate the creation of value within, and at the interface of, companies that form a product's supply chain. The ability of strategic cost management (through the application of management accounting techniques and practices) to support value creation, derives from the ability of its concepts (value chain analysis, strategic positioning and cost driver analysis) to blend in well with, and support, the other approaches that are adopted by companies along the supply chain.

Also, the research revealed that the application of management accounting techniques and practices that support strategic cost management, such as activity-based costing/management, total quality management, just-in-time, life cycle costing, kaizen costing and advanced management accounting, was not always apparent from the terms used by practitioners. Evidence of the application of these techniques emerged from the characteristics of the various approaches applied to support strategic cost management, such as activity analysis, quality focus, delivery scheduling, returns to manufacturer (RTMs) analysis, and continuous improvement. This finding implies that the study of the adoption and application of advanced management accounting techniques to support strategic cost management may have to be done in the context of the characteristics of the terms used by practitioners.

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# CHAPTER ONE

## 1.0 Introduction

This research investigates the application of strategic cost management along a product's supply chain. In particular, the research focuses on the extent to which strategic cost management supports value creation for the companies that constitute the supply chain. Value is being seen in the context of the benefits, (such as cost reduction, operational efficiency, improved profitability, etc.) that accrue to the supply chain participants. Whereas much has been said about the inability of traditional management accounting to support decision-making processes, especially strategic decisions, (Kaplan, 1984; 1988; Johnson and Kaplan, 1987; Ezzamel *et al*, 1990; Scapens, 1999, Seuring, 2002), the potential of strategic cost management to support strategic decisions and inter-company operations has been widely recognised, (Bromwich and Bhimani, 1989; Shank, 1989, Shank and Govindarajan, 1989, Cooper and Slagmulder, 1998). Also the strategic importance of supply chain management has been highlighted by a number of researchers, (Johnson and Lawrence, 1988; Harland 1996; Margretta, 1998, Chandra and Kumar, 2000, Bagchi and Skjoett-Larsen, 2002).

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However, there are a number of issues that have not been discussed within the supply chain management literature, one prominent example being cost management.[1] In other words, although both cost management and supply chain management have one thing in common – the management of costs – very little research has been done to investigate the transfer and application of cost management concepts and instruments to supply chain management. For example, Seal *et al* (1999), Van der Mere-Kooistra and Vosselman (2000), Tomkins (2001) and Dekker (2003) all bemoaned the lack of research into the

[1] Schneidewind (2002) – Foreword in Cost Management in Supply Chains.

role that management accounting plays in supply chains. They all highlight the importance of supply chain management in today's business environment.

## 1.1 Background

Several calls have been made for accounting to take a broader business perspective (Brouthers and Roozen, 1999; Scapens, 1999) and focus on issues that are beyond the immediate boundaries of an organisation, (Shields, 1997; Innes, 1999; Drury, 2000). The role of accounting therefore should be seen in the wider social context of groups, organisations and society, (Atkinson *et al*, 1997), as typified by inter-company supply chains. Supply chain management (SCM) has assumed a strategic role in today's global business environment where survival of companies is only assured by satisfying the end-use customer, (Johnstone and Lawrence, 1988; Harland, 1996; Stuart, 1997; Magretta, 1998). The global business environment has over the recent years changed from a steady state to a sea of hyper-competition where competition has gone beyond manufacturer versus manufacturer, distributor versus distributor, and retailer versus retailer, (Blackwell and Blackwell, 1999). The turbulent business environment has brought in many challenges that threaten the survival of businesses. The fast-paced market (Magretta, 1998) has seen many players coming in due to the opening up of hitherto closed economies, new technology and information exchange capabilities coupled with the advent of E-commerce (Blackwell and Blackwell, 1999) beyond national and regional boundaries. Invariably consumers have a wide range of goods and services from which to choose; hence they are not confined to a few suppliers.

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The customer-is-king market paradigm has ushered in an era that is characterised by decreased customer loyalty, ever-changing quality and customer service requirements, (Landry and Chan, 1999; Blackwell and Blackwell, 1999), shorter product life cycles, (Mirra, 1999; Drury, 2000), mass product customisation, (Fisher, 1997; Vollman and Cordon, 1998; Lee, 2000) and fast-paced technological innovations (Drury, 2000). The survival of companies hinges on creating value for the end-use customer in this consumer-centred market where flexibility, speed and productivity are the battle commands (Blackwell and Blackwell, 1999). The trend towards greater product variety

means that companies have to be able to create new designs quickly and efficiently, shifting production from one product to another without wasting time or materials, (Johnstone and Lawrence, 1988; p. 96).

Companies have responded to these challenges over the years through vertical integration and later on with outsourcing. Vertical integration has failed to address the needs of customers due to its internal focus, which precludes companies from looking beyond the immediate horizon. Vertical integration is motivated by the need to reduce costs by removing transactions from the market. It is based on the transaction cost theory, (TCT), (Williams, 1975), or the transaction cost economics, (TCE), (Williamson, 1991) which are derived from Coase's (1937) economic theorem that says a firm will grow until the marginal cost of discovering opportunities for gain within the firm exceeds the marginal cost of discovering opportunities for gain in the market. The TCE is concerned with the relative advantages of *internal coordination* by management over *external coordination* by the market. Therefore a company acquires and controls another (others) in order to remove transactions from the market where internal coordination is seen as cheaper than market-based transactions. Lorenzoni and Lippparini, (1999) argue that the TCE emphasises the logic of single-party cost optimisation; hence it does not fully embrace other types of costs, for example learning and coordination costs. The TCE is therefore regarded as static as it focuses on a single transaction, and is thus not suitable for understanding learning and innovative processes "when knowledge is broadly distributed and the locus of innovation is found in a network of inter-organisational relationships", (Lorenzoni and Lipparini, 1999; p. 1). Thus the failure of vertical integration to address the end-use customer's ever-changing needs is due to emphasis on cost reduction and internal focus rather than focusing on broader business issues[2].

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Outsourcing or unbundling, has also failed to address end-user needs due to companies maintaining market based, arms-length relationships. Citing Gambino, (1980) Tayles and Drury, (1999) report that traditional outsourcing was seen as a matter of make/buy

[2] However, it is also important to note that the failure of vertical integration is in the context of the failure of other organizational aspects, such as reward systems, incentives, culture and market structures.

decision in which companies emphasised return on investment (ROI) and cost. Although in the 1990s companies started to consider efficiency and price advantage, (Ford *et al,* 1993), they continued to pursue an operational approach based on limited analysis of make/buy issues. In other words, outsourcing decisions continued to be made without due regard to the strategic intent of the organisations. The late 1990s have seen a significant number of companies having a clear policy on outsourcing although they continue to regard outsourcing as a localised and tactical issue, (Alexander and Young, 1996), i.e. not much effort has been expended in creating a partnership.

Strategic outsourcing has been suggested as a solution because it is supposed to give precedence to strategic considerations rather than technical and conventional issues involved in purchasing decisions (Tayles and Drury, 1999). Zhu *et al*, (2001) argue that in today's knowledge- and service-based economy, strategic outsourcing offers a lot of opportunities for well-run companies to increase profits. However, as observed by Tayles and Drury, (1999), many companies do not see an outsourcing decision as strategic, thereby relegating it to the operational and purchasing level. The research done by Fan (2000) in the UK shows that outsourcing has to a larger extent not been treated as strategic. Out of 22 companies surveyed, not even a single company said that outsourcing is fully integrated in its business planning process, and yet Zhu *et al* (2001) argue that successful outsourcing depends on a sound business plan that identifies all costs associated with the current method of doing business and all the anticipated costs once outsourcing is deployed.

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Thus cost reduction has remained the predominant reason for outsourcing, (Jennings, 2002), among other reasons such as improvement of service, quality, delivery and organizational focus, increased flexibility and ability to change (Fan, 2000; Zhu *et al*, 2001). This has caused regrets over outsourcing due to anticipated cost savings not being achieved, with some companies just breaking-even and at times experiencing cost increases, (Jennings, 2002). Unrealistic expectations by the outsourcer, (Fan, 2000), failure of the supplier to match the customer's internal economies, the presence of a few dominant suppliers, absence of fully developed service level monitoring, the development

of quality, and failure to measure the performance of outsourced services, (Jennings, 2002), have been cited as reasons for the mediocre outcomes of outsourcing (Fan, 2000). Citing Lacity *et al*, (1994) and Canzoneri, (1997), Fan, (2000) argues that research evidence suggests that most outsourcing deals have fallen short of expectations and hence have deteriorated over time.

As a strategic response to the intense competition, companies in a wide variety of industries are turning to SCM because it is seen as a way of transforming companies into enterprises that are more responsive to customer demand, (Poirier, 1998; Dekker and Van Goor, 2000; Bommer, O'Neil and Treat, 2001; Bagchi and Skjoett-Larsen, 2002). By working together along a product/service supply chain, companies are expected to create value for end-use customers as well as for themselves through operational efficiency and cost reduction. This development requires the contribution of the ideas from management accounting (as an information system) and management accountants, both internal to the company and in inter-company relationships, (Cullen *et al*, 1999; p. 32).

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However, traditional management accounting widely used in practice is criticized for being irrelevant for decision-making and supporting company strategies (Johnson and Kaplan, 1987; Scapens, 1999) and being too narrow and internally focused such that it cannot take into account supply chain issues, (Medina, 1999). Such a narrow business perspective (Kaplan, 1988; Scapens, 1999), is seen as encouraging internal focus (Barkar and Majid, 1999) and individualism, (Hopwood, 1972; Hoskin and Macve, 1988; Ezzamel *et* al, 1990; Scapens 1999), and hence cannot deal with inter-company issues. Inter-company supply chain issues require management accounting to focus beyond the immediate boundaries of companies (Atkinson *et al*, 1997; Barkar and Majid, 1999; Cullen *et* al, 1999).

The current global competitive environment requires a cost information system that assists with the management of the future; a requirement that has led to the introduction of cost management. Cost management involves a proactive management of costs by influencing cost structures and cost behaviour, and it covers the assessment, planning,

controlling and evaluation of costs along the supply chain (Seuring, 2002). Cost management is therefore one of the most important performance measures used in supply chain management. However, very little research has been done to investigate how cost management is implemented along the supply chain. While there has been parallel research in supply chain management and cost management, research integrating these topical issues has been scanty. In other words, the link between cost management and supply chain management remains largely a neglected field, both with regard to practice and academic research (Axelsson *et al*, 2002). As Seuring (2002b) puts it:

> ".....if costs are to be reduced, companies increasingly turn their attention to their supply chain partners, so both suppliers and customers reach out for new frontiers of competitiveness and profitability. Yet, few approaches exist so far, addressing, how cost management in a supply chain can be carried out," (p. 1).

The focus of this research therefore is to investigate how cost management (both techniques and practices) is being applied along a product's supply chain to support value creation.

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## 1.2. THE STATEMENT OF THE PROBLEM

**How is strategic cost management applied along a product's supply chain to support value creation within the South African retail industry?**

The research question is broken down into three main areas, namely supply chain management, value creation and management accounting. In each of these areas, sub-problems are then answered, first by reviewing literature, and then selecting some of them for empirical study. The sub-problems addressed by reviewing literature are as follows:

### 1.3 Sub-problems

The sub-problems are parts of the main research problem whose answers collectively answer the main research problem. The answers to these sub-problems helped shape the

focus of this research by empirically investigating supply chains within the South African retail industry.

### 1.3.1 Supply chain management

1. What are the definitions of supply chain management?
2. What are the types of supply chain management and which activities and processes are coordinated in supply chain management?
3. Which conditions facilitate the exchange of confidential information, mutual investments and mutual growth?
4. Which coordination mechanisms are used in supply chain management?
5. Which theories (reasons) explain the formation of supply chains?
6. What formation and developmental processes are involved in supply chains?
7. What are the barriers to, and enablers for, implementing supply chain management?
8. What are the implications of supply chain management on the business landscape and on management accounting?

### 1.3.2 Value creation

9. What are the definitions of value associated with supply chain management?
10. How is the value associated with supply chain management created?

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### 1.3.3 Management accounting

11. What are the definitions of management accounting?
12. What are the characteristics of management accounting?
13. Which management accounting techniques and practices are associated with supply chain management and value creation?

In order to answer the above research questions, this research uses a multiple research method (a survey and case studies) to gather empirical evidence. The survey gathers information about the supply chain management practices in the South African retail industry, i.e. it establishes the context in which the application of cost management is studied. The case studies provide an in-depth understanding of how cost management is being applied along supply chains in the South African retail industry in the process of value creation.

## 1.4 Organisation of the Thesis

The thesis is organised into chapters that each deals with specific research sub-problems that form part of the research. The rest of the thesis is thus organised as follows. Sub-problems 1 to 8 are dealt with in Chapter two. Chapter three answers research sub-problems 9 and 10, while chapter four deals with research sub-problems 11 to 13. The chapter concludes by presenting the research questions that will be subjects of the empirical studies, as well as the research goals/objectives. Research methodology is dealt with in Chapter five, while Chapter six presents results from the survey. Chapter seven presents case study results and Chapter eight deals with the analysis of the results from the survey and case studies and the research findings. Chapter nine presents a summary of the research findings, recommendations, areas for future research and conclusion.

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# CHAPTER TWO

## INTER-COMPANY SUPPLY CHAIN MANAGEMENT

### 2.0 Introduction

This Chapter is concerned with inter-company supply chain management as it relates to strategies being employed by companies within the global business environment. The chapter deals with sub-problems 1 to 8, whose answers collectively assist in the understanding of supply chain management. In this global environment, companies no longer compete solely against other companies but are forming networks of capabilities that are integrated by 21st Century information technologies. This network formation is in response to the rapidly changing business landscape that is characterised by ever-increasing customer demands, shorter product life cycles, and mass product customisation. Consequently, inter-company supply chain management assumes a strategic dimension by allowing companies along a product/service supply chain to pull their resources together and compete against other supply chains for the customer.

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#### 2.1 Sub-problem 1

*What are the definitions of supply chain management?*

#### 2.1.1 Definitions of inter-company supply chain management

Inter-company supply chain management (SCM) is a strategic partnership that unifies the systematic planning and control of all technologies, materials and services of companies in the value chain with the objective of meeting customer requirements (Cullen *et al*, 1999). SCM involves the flows of material, information, and finance in a network consisting of customers, suppliers, manufacturers, and distributors, (Lee, 2000; p. 2). Companies co-ordinate their individual activities to satisfy the end-use customer and *ensure the profitability of the entire supply chain*. Thus a supply chain is seen as a synchronised flow of product, information, processes, and cash – from raw material to

end customers – that optimizes the profitability of the entire value chain, from the suppliers' suppliers to the customers' customers, and the individual business partners that make up the chain.[3] SCM is also referred to as "demand chain" relationships (Vollman and Cordon, 1998) because it is customer demand that triggers a chain of reaction backward through the entire chain, to the suppliers of suppliers. Others regard SCM as co-operative relationship development (Holm *et al*, 1999) and value-adding partnerships (Johnston and Lawrence, 1988).

All the definitions indicate that these relationships create a bond (of trust) between suppliers and their suppliers, customers and their customers, i.e. they are an act of connecting everything with everything else, (Chakraborty, 1999). Consequently, the actions of supply chain partners go beyond the immediate boundaries of their own businesses.

### 2.1.2 A brief history of supply chain management

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Although SCM is not new, it has only recently generated a lot of interest. Cooper *et al*, (1997) trace the concept of supply chain management back to the 1960s. Citing Bucklin, (1966) and Forrester, (1969), they argue that the assumptions underlying SCM as it is known today are significantly old. They state that the idea of managing inter-organisational operations can be traced back to channels research in the 1960s, citing Bucklin, (1966). Citing Forrester, (1969), Cooper *et al*, (1997) also argue that the need to integrate systems between companies along a supply chain can be traced to systems integration research. They also trace the idea of sharing information between companies along a supply chain to the research in the 1980s, and they conclude that the use of the term "supply chain management" is relatively new in the literature, first appearing in 1982 (citing Keith and Webber, 1982).

In the 1980s, supply chain initiatives were mainly concerned with reengineering supply chain cost structures. Anderson and Lee (1999) argue that during this period, supply chain initiatives were driven by corporate restructuring and downsizing, as company

[3] Cap Gemini Ernst & Young and IndustryWeek, *Report on the 2000 Value Chain Survey.*

strategies responded to the accelerated opening of global markets, (p. 1). Citing research by the Council of Logistics Management in USA, Anderson and Lee, (1999) state that these supply chain strategies worked very well, for instance, companies managed an average reduction in logistics costs of 33 percent over the period. However, the 1990s have seen a new driving force behind supply chain corporate strategy – the need to delight global customers, (Johnson and Lawrence, 1988; Margretta, 1998; Anderson and Lee, 1999).

The 1990s have seen customers becoming very demanding, expecting higher levels of product and service performance, (Anderson and Lee, 1999). Due to the globalisation of many industries, customers have access to competitive products and better alternatives, which have made them expect greater product/service customisation, and at the same time getting used to a constant stream of innovations in the goods and services they use, (ibid; p. 1). Thus there has been a change in supply chain strategy as companies realised that the purpose of supply chain integration is not solely to reduce costs. Instead companies regard SCM as a catalyst for value creation by achieving higher levels of customer satisfaction as a way of creating long-term relationships that impact positively on their profitability. SCM strategy has therefore changed from being internally focused with the objective of cost reduction, to being externally focused with the objective of achieving greater customer satisfaction, as a way of creating value for all supply chain partners. Consequently, the mid 1990s have seen companies establishing tightly integrated or synchronised supply chains, where information technology and the Internet are the key enablers of the supply chain innovative strategy.

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However, the history of SCM is not without its own confusion in terms of what exactly supply chain management comprises. SCM has been seen as an extension of logistics, or the same as logistics and in some cases as an all-encompassing approach to business integration, (Cooper *et al*, 1997). In other words, SCM has been regarded as logistics that spans organisational boundaries. However, to clarify this confusion, a look at the definitions of both logistics and SCM is pertinent. Logistics is defined as:

> The process of planning, implementing, and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods, and related information flow from point-of-origin to point-of-consumption for the purpose of conforming to the customer requirements.[4]

The above definition of logistics shows that logistics is concerned with the efficient flow of materials in their different forms, i.e. "from dirt to dirt" (Cooper *et al*, 1997) and the concomitant information requirements. However, the definitions of supply chain already given, and the following definition, show that logistics and SCM are not one and the same thing. Christopher and Ryals, (1999) define SCM as:

> The network of organisations that are involved, through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services in the hands of the ultimate customer, (p. 3).

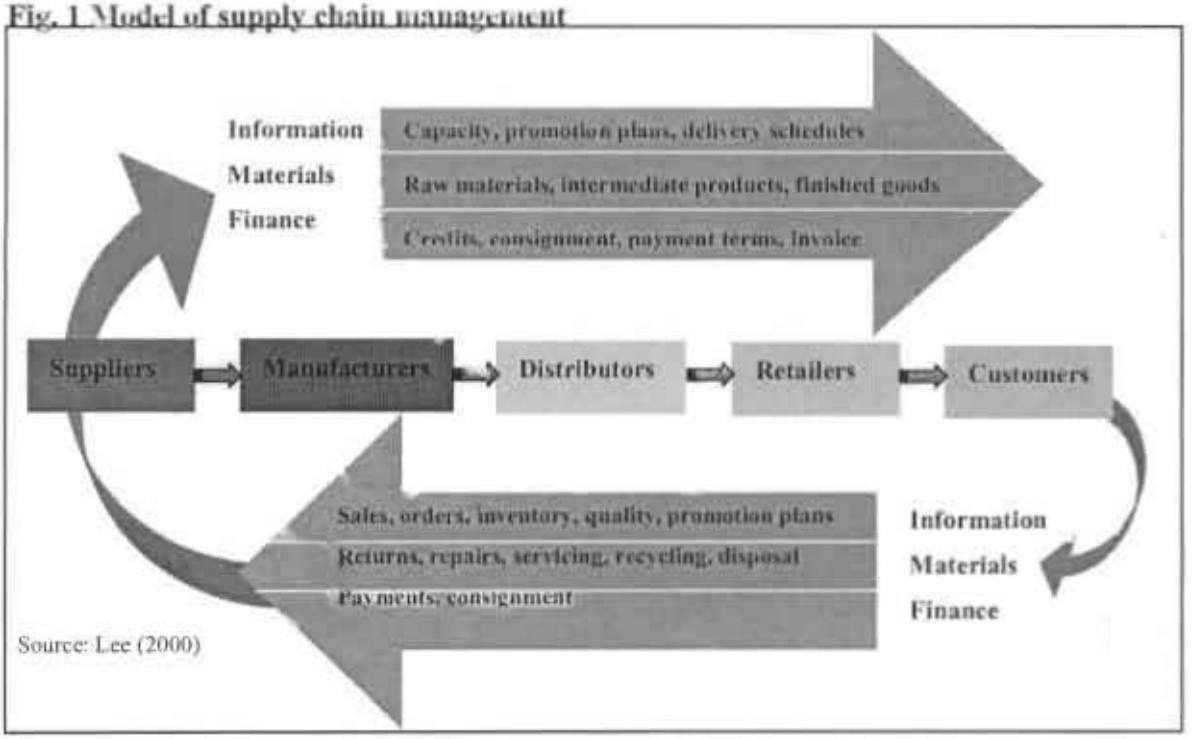
Thus SCM goes beyond the scope of logistics to include the establishment of long-lasting, trust-based collaborative relationships between companies along a product/service supply chain, who treat each other as partners. Consequently SCM involves sharing information about new product development, which includes marketing for the concept, research and development for the actual design, manufacturing, finance *and* logistics, (Cooper *et al*, 1997) [emphasis added]. Thus external entities (both suppliers and customers) are included in the new product development and the processes that come with it, including logistics. Therefore logistics and SCM are not synonymous. Logistics is *only* a part of SCM, and SCM is *not* a subset of logistics. Figure 1 below depicts SCM as it is known in today's global business environment.

Figure 1 below shows that SCM is more than the movement of goods and services. It entails information flow to and from suppliers and customers, as well as finance attached to transactions that take place between supply chain partners.

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[4] Council of Logistics Management, 1986.

Fig. 1 Model of supply chain management




Source: Lee (2000)

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### 2.2 Sub-problem 2

*What are the types of, and which activities and processes are coordinated in supply chain management?*

#### 2.2.1 Types of inter-company supply chain management

Inter-company supply chain management can involve companies that belong to the same group of companies as well as those companies that are not related through ownership. This research will focus on both forms of inter-company SCM, i.e. where companies belong to the same group and where they are not related through ownership, but through trust-based collaborative relationships.

Inter-company supply chains can be undertaken at levels that range from one to four, according to Poirier, (1998). Level one is where the companies in the supply chain focus on reducing *internal* operational costs, through pricing, inventory reduction, logistics and freight savings. Departmental buyers and sellers (as opposed to top management) largely drive the cost reduction initiatives. The whole process is *internally* focused and there is

complete functional independence. In level two, companies are still internally focused and their emphasis is on *internal* functional excellence. Since the emphasis is on *internal* performance improvement, and not the performance of the entire chain, the processes that are improved sometimes fail to add value to the customer, and as well as the other supply chain partners.

SCM relationships in level one and two are also known as the "old" model where companies focus on their profitability by wringing concessions from their partners (Kumar, 1996; Quinn, 1998). Bob Lutz, former Chairman of Chrysler calls this model "industrial feudalism"[5] because suppliers are regarded as lowly serfs forever at the beck and call of buyers. Companies within the chain think that they are self-contained and they can do anything and everything, hence they have a market-based, arms-length relationship. Consequently, companies regard their customers as number one enemy, suppliers as number two enemy, and departments within the same company regard each other as number three enemy, (Hammer, 1998)[6].

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Level three and four represent a paradigm shift as companies give emphasis to the whole supply chain. There is a change in the relationship between companies along the supply chain from an adversarial attitude to one of mutual support and cooperation, (Cooper *et* al, 1997). They regard each other as partners and it is at this stage that there is a real involvement of companies in each other's business. There is total commitment to the relationship, as evidenced by **mutual investments**, **collaboration**, **trust**, **focus on customer service** and **inter-company objectives**. While initiatives in supply chain level three are driven by business-unit leaders, in level four the whole management team is involved. Level four entails a change from product-orientation to customer-orientation, ensuring that the whole supply chain is attuned to the requirements of the customers. Table 1 below shows a comparison between the traditional model and the new model. Companies in supply chains level three and four typify the new model. The focus of these

[5] In Chrysler's Leap of Faith: Redefining the Supplier Relationship, by Thomas T. Stallkamp, 1998.
[6] See Quinn, 1998: Re-engineering the Supply Chain: An interview with Michael Hammer.

companies is on the performance of the entire chain, because it is the chains that compete, not the individual companies in them.

**Table 2.1 Traditional SCM model versus new SCM model**

| | Traditional SCM model | New SCM model |
|---|---|---|
| Time Frame | Short-term, renewable | Long-term, sustainable |
| Strategic orientation | Subcontracting | Strategic outsourcing |
| Inter-company relationship | Superior-subordinate | Leader-team member |
| Information flow | One-way | Two-way |
| Decision making | Precise | Guidelines, between work units |
| | Unilateral | Consensus-oriented |
| Planning | Few executives, experts | Many managers, line and staff |
| Product improvement | Defined contract | Ever-changing, fluid |
| Control | Traditional hierarchy | Multi-disciplinary teamwork |
| Primary objective | Price | Quality, price, timing |
| Profit orientation | Buyer controlled | Mutually controlled |

*Source: Buono, 1997*

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The firms regard each other as strategic partners, (Cullen *et al*, 1999), hence they create a seamless organisation structure, a virtual enterprise, (Magretta, 1998) through the use of information technology.

## 2.3 Sub-problem 3

*Which conditions facilitate (i) the exchange of confidential information, (ii) mutual investments and (iii) mutual growth?*

### 2.3.1 Conditions that facilitate the exchange of confidential information, mutual investment and mutual growth.

The birth of inter-company supply chain management as a way of dealing with the market volatility is a point of departure from the way in which companies relate with their suppliers and customers. Vollmann and Cordon, (1998) see this as a transformation that entails 'doing better things' not just doing 'things better' and that needs to focus on creating value for the customer because it ".... is the 'voice of the customer' which

dictates the necessary changes in the [supply chains]", (p 684). Inter-company supply chain relationships are seen as marriages that are based on:

> an abiding trust, a long term commitment, a desire to achieve win-win situations, the need to foster mutual growth and support, a willingness to go the extra mile when needed, the development of resistance to complacency, how to outperform competing chains and how to implement an aggressive improvement agenda, (Vollmann and Cordon, 1998).

### 2.3.2 Trust

Trust, in the context of SCM may be defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party", (Meyer *et al*, 1995; p. 712). Others define trust as mutual exchange and fulfilment of promises, (Gronroos, 1994), social and constitutive expectations, (Neu, 1991a). Social expectations are the taken-for-granted practices widely accepted by members of society, while constitutive expectations are specific to a particular exchange transaction and the parties involved, and these expectations are learned over time, (Neu, 1991a). Trust is therefore seen as "... the belief that an exchange partner would not act in self-interest at another's expense...", (Uzzi, 1997; p. 43). It operates by assuming the best when interpreting a partner's motives and actions because of the personal relationship that exists between the partner companies.

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The issue of trust is fundamental in supplier-purchaser relationships. Pick, (1999) argues that the relationship is more likely to thrive if both parties are committed to it and see it as an important part of future strategy. Underlying such commitment is trust, and Kumar, (1996) puts it this way:

> Trust is stronger than fear. Partners that trust each other generate greater profits, serve customers better, and are more adaptable, (p. 92)

The need for trust comes from the fact that supply chains are expected to be collaborative instead of confrontational, (Pick, 1999; Holm *et al*, 1999). Johnston and Lawrence,

(1988) argue that where there is no trust, companies hold each other at arm's length and struggle to keep any economic gains to themselves, (p. 98). Thus without trust, the relationship is:

> antagonistic, and rooted in fear that the other [party] will become a competitor or engage in some other opportunistic behaviour. Naturally such companies tend to share as little information as possible, and consequently managers often lack knowledge of the activities elsewhere along the value-added chain, (Ibid, p. 98).

Thus when both parties trust each other, they are able to share confidential information, invest in understanding each other's business, and customise their information systems or dedicate people and resources to serve each other better, (Kumar, 1996; p. 97). Through trust supply chain partners can avoid opportunistic behaviour, which goes against the spirit of mutual trust. Consequently, supply chain partners are able to have a set of shared values (shared philosophies, goals and complementary strategies), (Pick, 1999), which form the cornerstone of shared destiny principles of partnerships (Ahmed *et al*, 1997).

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### 2.3.3 Resistance to complacency

The need to develop resistance to complacency comes from the realisation that companies are no longer able to achieve a sustainable competitive advantage by pursuing either a low-cost or differentiation strategy, (Tani *et al*, 1994). They argue that in this turbulent business environment, companies realise that any competitive advantage they achieve is likely to be short-lived due to competition that brings new products at competitive prices. Through the use of the latest technology available, such new products come with advanced features, and this puts pressure on firms to respond like-wise. The way to survive in such a highly competitive environment is through continuous improvement, (Cullen *et al*, 1999).

Vollmann and Cordon, (1998) support this view by arguing that SCM has to have as its primary objective, rapid learning through an aggressive agenda for improving the value creation and cost reduction activities in the chain, (p. 692). The ability of the supply chain partners to avoid complacency is based on the fact that the relationship is "...built on

intensive relational bases [which makes it] open to the contamination of new actors, thereby avoiding organisational inertia", (Lorenzoni and Lipparini, 1999; p.333). If any of the supply chain partners were to be complacent, Nonaka, (1994) argues that the extent of the competence and knowledge of the other partners creates a redundancy effect of differential potential inputs and consequently leads to innovation and change.

### 2.3.4 Competitive thrust of the supply chain

The competitive thrust of supply chains is on the entire supply chain, not just one part of it, (Johnston and Lawrence, 1988; Cullen *et al*, 1999). Thus the focus of the supply chain partners is on outperforming other competing chains. The supply chain is regarded as one competitive unit, in which each player has a stake in the other's success, (Johnston and Lawrence, 1988; p. 95).

### 2.3.5 Long-term commitment

Long-term commitment is the outcome of mutual commitment and mutual dependence, (Holm *et al*, 1999), which are the two most important ingredients for value creation. Supply chains are therefore of strategic importance to the partner companies and long-term commitment enables the chain to weather adversity, (Pick, 1999). It is also important to note that these relationships take time to develop, requiring considerable 'care and feeding' as well as ongoing transformation, (Vollmann and Cordon, 1998; p. 684). Therefore suppliers and their customers "must both make strong commitments that require *a long-term perspective* in developing their business with each other", (Holm *et al*, 1999; p. 468), [emphasis added].

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### 2.3.6 Destiny principles of partnership

The emphasis on a win-win situation, fostering of mutual growth and the willingness to go the extra mile when needed, (Vollmann and Cordon, 1998) are all based on the shared destiny principles of partnership. This is because the sense of partnership must become a reality, (Johnston and Lawrence, 1988; p.100). Therefore true partnership is seen as manifesting itself in the form of a win-win spirit that spans the entire supply chain, where

partners are willing to go the extra mile to foster mutual growth and support. Vollmann and Cordon, (1998) give an excellent summary of the above issues as:

> Value is ....produced by developing competencies throughout the entire chain. It is the chain that competes, and it is the chain that needs to be excellent. The goal must be to create distinctive competencies – for the chain - where the whole is greater than the sum of the parts, (p. 687).

They conclude that supply chains need to be *one in fact*, not only *one in name*, hence each chain should act with one voice, one set of values and one direction.

### 2.4 Sub-problem 4

*Which coordination mechanisms are used in supply chain management?*

#### 2.4.1 Organisation of inter-company supply chain management

Inter-company supply chain management involves having a clear supply chain strategy and leadership, collaboration, connectivity and use of technology. These factors enable companies to create a supply chain that is responsive to the needs of customers in an increasingly faster, effective and efficient way.

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#### 2.4.2 Supply chain strategy and leadership

*"Creating a value chain management strategic imperative has reached the highest levels in the corporation. Executives have seen the benefits of planned value chain initiatives and are now jumping into the driver's seat"*[7]

The above quote illustrates the importance of a clear supply chain strategy supported by executives at the highest level who drive the supply chain strategies and also facilitate the interactions of supply chain partners throughout the chain. A deliberate supply chain strategy that enjoys support from top executives has the potential to meet the needs of customers, which in turn positively impacts on the supply chain partners' bottom-line.

[7] Phil Roberts, Vice President & Director, Global Supply Chain Practice, Cap Gemini Ernst & Young U.S. LLC

The survey conducted by Cap Gemini Ernst & Young and IndustryWeek (2000) showed that companies that had a clear supply chain strategy were more successful than those that did not have a clear supply chain strategy.

### 2.4.3 Collaboration

Collaboration in SCM involves all functions of the supply chain interacting with suppliers and customers up and down the entire chain. Collaboration entails sharing information about new product developments, sales forecasts, production information, inventory, distribution/logistics, as well as strategic issues, (Leverick and Cooper, 1998; Cap Gemini Ernst & Young and IndustryWeek, 2000). There is also a supportive supplier-manufacturer relationship in that suppliers can send their personnel to assist manufacturers in effectively utilizing the items they sell to them. Conversely, manufacturers can also send their personnel to work with their suppliers so as to produce items as per the manufacturers' specifications. Such collaborative practices were demonstrated by the research conducted by Leverick and Cooper, (1998), which also showed that collaboration includes the involvement of suppliers in product design and development.

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Thus through collaboration, inter-company supply chains are capable of responding well to the 'customer-is-king' market paradigm because of the 'intimacy' of the partners that facilitates planning close to the market (Magretta, 1998). Being close to the customer, a retailer for instance, is able to notice market changes that require increased innovation and flexibility. This information is then quickly sent from partner to partner throughout the chain until it reaches the supplier(s) of raw materials so that necessary changes are made. Consequently, companies along the supply chain are able to have better product information about end-use customer needs, as well as improved production operations, (Chandra and Kumar, 2000). "It's all about flexibility, response time, small production runs, small minimum order quantities and the ability to shift direction as the trends move," (Magretta, 1998, quoting Victor Fung, Chairman of Enter Li & Fung).

However, the development of trust is important in enhancing collaboration between supply chain partners. Without trust, information sharing (which is an integral part of collaboration) would be difficult because information is regarded as conferring power on the party that has it. Thus the presence of trust is a major determinant of success of the supply chain because it facilitates (and is also facilitated by) information sharing, which provides the cement for the supply chain structure, (Leverick and Cooper, 1998).

### 2.4.4 Technology and connectivity

SCM requires enabling technology to enhance tight integration that is seen as a pre-requisite to success. Advances in information technologies in recent years have made it possible for suppliers and their customers to share information electronically. These systems, commonly known as electronic data interchange (EDI) have the potential to confer significant economies of scale to supply chain partners in critical areas such as procurement, delivery, and supply chain coordination, (Maltz and Srivastava, 1997). Malone *et al*, (1987) contend that the use of electronic communication links between companies along the supply chain has potential for cost reduction in coordinating economic transactions as well as production.

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Anderson and Lee, (1999) argue that software and hardware advances have given supply chain partners real capabilities in the form of sophisticated forecasting, highly predictive scenario planning, optimization logic to supply chain activities and rapid order configuration and order promising, (p. 7). Through the expansion of software such as Enterprise Resource Planning, (ERP), Anderson and Lee, (1999) state that it is easier to provide integration of information across multiple supply chain activities and other business systems within the company. The advent and rapid development of the Internet have made it possible to have effective business-to-business collaboration. The Internet is seen as offering a huge potential for supply chain partners to share a much more diverse and broad-based information than the traditional EDI methods. A recent survey by Cap Gemini Ernst & Young and IndustryWeek, (2000) revealed that those companies that were tightly integrated through information technology were not only able to share a lot

of important information, but they were more successful than those with loose connectivity.

### 2.5 Sub-problem 5

*Which theories (reasons) explain the formation of supply chains?*

#### 2.5.1 Theories that explain the formation of supply chains

Theories that explain the formation of inter-company SCM relationships abound. Grant, (1996) argues that there is no single, multi-purpose theory of the firm because every theory of the firm "....is an abstraction of the real-world business enterprise which is designed to address a particular set of characteristics and behaviour", (p.109). Consequently, theories may offer rival explanations of the same phenomena and also complement each other in explaining different phenomena. Therefore, for the purposes of this research, only a few relevant theories will be explored.

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SCM relationships are seen as emerging in order to deal with the cost optimisation problem, (transaction cost economics theory, TCE), (Williamson, 1975, 1991; Hennart, 1988; 1991). Others see the formation of these relationships as a result of the need to integrate knowledge, (knowledge based theory, KBT), (Nonaka, 1994; Grant, 1996a; Mowery *et al*, 1996), and the need of two or more exchange partners to benefit from resources they receive from each other, (resource based theory, RBT), (Dierickx and Cool, 1989; Barney, 1991; Peteraf, 1993; Lorenzoni and Lipparini, 1999). From the social side comes the social exchange theory (SET), (Uzzi, 1997; Gulati, 1995; 1998), which explains the evolution of SCM in terms of collective actors that interactively increase their commitment to the relationship, (Emerson, 1981). Holm *et al*, (1999) take a business network interdependence theory (BNIT) to explain the emergence of SCM in terms of the opportunities that connected businesses can exploit together.

### 2.5.2 Transaction cost economics theory (TCE)

The transaction cost economics (TCE) theory is based on the assumption that the organisation of economic activity is a choice between markets and hierarchy, (Williamson, 1975). He argues that controlling production hierarchically through ownership is more efficient than market based strategies in tackling the transaction cost minimisation problem. The idea here is that organisations react to uncertainties and dependencies in their environment by removing transactions from the environment and placing them in more hierarchical contexts, (Lorenzoni and Lipparini, 1999). The formation of SCM relationships is seen as the need to reduce transaction costs that entail market-based relationships by preventing transaction partners (through acquiring them) from acting opportunistically during contract execution/renewal, (Zajac and Olsen, 1993).

The TCE has attracted a lot of criticism from researchers due to its focus on a single-part cost optimisation, (Williamson, 1991; Zajac and Olsen, 1993; Liebeskind, 1996; Lorenzoni and Lipparini, 1999). Zajac and Olsen, (1993) argue that TCE explains vertical integration, where a single company is considering a choice between market *or* hierarchy as a way of reducing transaction costs. However, inter-company supply chain relationship strategies are a blend of market *and* hierarchy. TCE is therefore no more than one company's 'make or buy decision' where the transaction cost calculations that lead to that decision are conducted by *one company for its own independent purpose and use*, (Zajac and Olsen, 1993; p. 134), [emphasis added].

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On the contrary, inter-company supply chain relationships are formed voluntarily by two or more organisations with the aim of creating and sustaining a relationship that is valuable to both partner companies. Thus in this relationship, exchange partners are not 'eliminated' through the creation of a single vertically-integrated hierarchical entity established through complete ownership, nor can the partners be viewed as only engaged in market-based transaction, (Zajac and Olsen, 1993).

TCE theory fails to accommodate the idea that the principal aim of companies in a supply chain relationship is to generate profits through the creation and maintenance of sources

of competitive advantage, (Barney, 1996; Liebeskind, 1996). It also pays little attention to knowledge, yet knowledge is seen as providing the potential for companies to earn profits in a sustainable way. (Nonaka, 1994; Liebeskind, 1996; Grant, 1996). TCE is therefore seen as providing a marginal connection between a company and its competitive advantage, (Liebeskind, 1996). Zajac and Olsen, (1996) conclude that:

> This fundamental distinction implies that the crucial transactional issue for inter-organisational strategies is not merely a single organisation's concern for minimising its transaction costs, but rather both organisations' concern for also (1) knowing the partner's preferences and concerns as basis for exchange and mutual gain, and (2) discovering ways in which similarities or shared interests can be exploited to maximise co-operative joint gains that accrue to both parties, (p. 135).

In conclusion, the TCE fails to explain the formation of SCM relationships due to its failure to recognise that the formation of these relationships is for the mutual benefit of the partners, not one single company.

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**2.5.3 Knowledge-based theory (KBT)**

The knowledge-based theory (KBT) regards knowledge as a key competitive asset, (Mowery *et al*, 1996). Knowledge is seen as the primary source of value, and therefore regarded as the critical input in production. This view seeks to put knowledge on the pedestal relative to other company resources. Grant, (1996) argues that all human productivity is knowledge dependent, and machines and other resources are simply an embodiment of knowledge. The strategic capabilities of a company come from its ability to integrate knowledge and transform dispersed, tacit and explicit competencies into a wide body of knowledge, (Nonaka, 1994; Grant, 1996a; Lorenzini and Lipparini, 1999). Thus a company is seen as an institution for integrating knowledge, (Grant, 1996). Mowery *et al*, (1996) state that companies form strategic alliances in order to either;

(1) acquire technology-based capabilities from alliance partners, or
(2) gain access to other companies' capabilities to achieve intensive exploitation of the existing capabilities within each company.

The first point does not appear to be a plausible explanation for the creation and sustenance of long-term, trust-based inter-company supply chain relationships. Technological transfer does not necessarily entail the formation of a virtual enterprise whose focus is on the performance (hence profitability) of the entire chain, guided by mutual commitment and mutual dependence. Technological transfer is more of an ad hoc relationship between the company whose technology is required and the company that needs the know-how. The second point appears to reflect the thrust of the inter-company relationships by focusing on the co-operative nature of the relationship. Inter-company relationships are seen as way of accessing and transferring knowledge, especially where it is complex and scattered or specialised, (Lorenzini and Lipparini, 1999).

There are a number of factors that influence the extent of inter-company knowledge transfer among supply chain partners. The transferability of knowledge depends on the kind of knowledge, whether it is tacit (knowing how) or explicit (knowing about), (Grant, 1996). Tacit knowledge is seen in its application and is acquired through practice. Examples of tacit knowledge or company-specific capabilities are knowledge of specific markets, user needs, idiosyncratic company routines such as decision-making techniques, management systems and complex networks for handling the marketing and distribution of products, (Mowery *et al*, 1996). Explicit knowledge is more of public information and is revealed by its communication, which is its fundamental property, (Grant, 1996). Information that can be aggregated at a single location like inventories, company cash balances or its foreign currency exposure, exemplifies explicit knowledge.

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The characteristics of the two kinds of knowledge have an impact on its transferability. Tacit knowledge is difficult to transfer because it cannot be codified but is only seen in its application. Referring to Kogut and Zander, (1992), Grant, (1996) agues that the transfer of tacit knowledge is slow, costly and uncertain. Mowery *et al*, (1996) support this view by saying that tacit knowledge is company-specific and its transfer through the market is difficult because it is organisationally embedded. Explicit knowledge, on the other hand, is easy to transfer because once created, it automatically becomes a public good and can be consumed by additional users at close to zero marginal cost, (Grant, 1996).

Transferability of knowledge is also determined by capacity for aggregation, (Grant, 1996). Knowledge aggregation is enhanced by expressing it in terms of common language, (Grant, 1996), i.e. transforming it into a language for economic discourse, (Bakar and Majid, 1999). Tacit knowledge is difficult to aggregate because it is idiosyncratic knowledge, which cannot be found at a single location. Explicit knowledge is easily aggregated into common language through the use of say, statistics and/or accounting.

The question of appropriability is also pertinent in knowledge transfer. The investment made in creating knowledge is impacted on by the ability of the owner to get a return equal to, or greater than the value created by the knowledge, (Grant, 1996). Tacit or company-specific knowledge is not directly appropriable because it is not easily aggregated and transferable. Therefore it is difficult to draft simple contracts governing the sale or licensing of such capabilities, (Mowery *et al*, 1996). Explicit knowledge presents proprietary problems as well because once created, it becomes public knowledge available to everyone. Thus investment in explicit knowledge is not attractive unless it can be protected once produced, by for example, the law or some other way.

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The last characteristic of knowledge that is also important in the KBT is the specialisation of its acquisition, (Grant, 1996). Naturally, people are limited in their capacity to acquire, store and process knowledge. Consequently, the division of labour, where people specialise in particular areas of knowledge, is the effective way of its acquisition and storage. It is through sharing that people from different fields or departments can benefit from knowledge acquired by specialists in other areas.

The above characteristics of knowledge are very important in explaining why companies create and sustain supply chain relationships in order to exploit the knowledge in their different organisations to achieve competitive advantage. Firstly, most of the knowledge that is relevant to production is tacit, (Grant, 1996); hence it is difficult to transfer it between organisational members, especially if their relationship is arm's length. The organisationally embedded knowledge requires an 'intimate' relationship between supply

chain partner companies because its benefit comes from its application. The transfer of tacit knowledge therefore entails close interaction in inter-company collaborative teams, managing dual commitment by rotating members of inter-company teams and structuring inter-company knowledge flows, (Loebecke *et al*, 1999).

As has already been mentioned, tacit knowledge is difficult to aggregate, which means that it can not be transferred by any other means other than involvement of the supply chain partner companies in each other's business. In other words, the knowledge has to 'rub off' from supply chain members of one company to the members of the other company in a reciprocal way. Even if explicit knowledge constituted the bulk of the knowledge required for production, investment in it is not attractive because it becomes public knowledge once produced. Other companies can easily imitate the capabilities and hence the competitive advantage from such knowledge is quickly eroded. Using the law to protect knowledge has its own drawbacks; knowledge property rights are weak and costly to enforce, (Liebeskind, 1996). Knowledge transfer through the market relationship is not an efficient way for knowledge integration. Grant, (1996) argues that effective integration of knowledge is through cross learning by organisational members. It follows from this reasoning that knowledge transfer in arm's length relationships does not achieve the level of integration that ensures a sustainable competitive advantage.

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The most effective way for knowledge integration that will give companies competitive leverage is the formation of trust-based, collaborative inter-company supply chain relationships. Co-operation between supply chain companies yields knowledge in excess of the exchange of individual knowledge, i.e. knowledge transfer creates synergetic value, (Loebecke *et al*, 1999). This way, companies are able to exploit knowledge that resides in each other's organisation while at the same time protecting it against imitation through differentially preventing expropriation and reducing the observability of knowledge, (Liebeskind, 1996). The synergetic value of knowledge transfer stresses the potential for companies to improve their competitive position by co-operating. However, synergetic value only exists if all players exchange knowledge, (Loebecke *et al*, 1999). This is achieved through an array of inter-company arrangements (SCM relationships)

that are not available in markets, (Liebeskind, 1996). This arrangement makes imitation difficult, thereby creating uniqueness: a central strategic issue. The protection of knowledge through the formation of SCM relationships incentivises companies to invest in innovation because the knowledge created therefrom is safe from expropriation.

Effective integration of knowledge by organisational members is done through cross learning or cross-pollination of ideas. This view supports the creation of multi-functional teams (Cullen *et al*, 1999) that operate within and across supply chain partner companies. The idea is to learn from the different members of each company, as well as from members of the partner companies within the supply chain. Access to the other's knowledge enables all parties to benefit from additional opportunities by exploiting the gained knowledge beyond co-operation, (Loebecke *et al*, 1999).

The life span of the competitive advantage gained by companies in the supply chain depends on the inimitability of the capabilities that underlie that advantage. The broader the scope of the knowledge integrated within a SCM relationship, the more difficult imitation becomes, (Grant, 1996). He concludes that the current interest in cross-functional capabilities reflects the strategic importance of the capabilities that require effective integration of knowledge from many disparate specialists.

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**2.5.4 Resource-based theory (RBT)**

The resource-based theory seeks to identify resources that may provide companies with sustainable competitive advantage, (Wernerfelt, 1989; Dierickx and Cool, 1989; Collins, 1991; Grant, 1991; Peteraf, 1993; Maijoor and van Witteloostuijn, 1996; Barney, 1996). A company is seen as a "...unique bundle of idiosyncratic resources and capabilities where the primary task of management is to maximise value through the optimal deployment of existing resources and capabilities, while developing the firm's resource base for the future", (Grant, 1996; p. 110). The competitive advantage of a company comes from a bundle of resources that the company has (Collins, 1991). The combination of a unique collection of resources within a supply chain therefore creates synergies that lead to sources of sustained competitive advantage, (Barney, 1991). Competitive

advantage is thus derived from the supply chain's superior resources compared to those of competitors, (Peteraf, 1989). The superior resources enable a supply chain to achieve a strong market position at lower cost compared to competing supply chains.

The RBT is seen as superior to the industrial organisation economics in explaining a company's sustained competitive advantage. The industrial organisation economics emphasises the attractiveness of the industry as the source of superior profitability, (Grant, 1991). However, such competitive advantage is not sustainable because international competition, technological change, and diversification by companies across industry boundaries have meant that industries, which were once cosy havens for making easy profits, are now subject to vigorous competition, (Grant, 1991). Therefore, in order to achieve competitive advantage, companies should focus their attention mainly on their 'unique' skills and resources rather than on the competitive environment", (Dierickx and Cool, 1989; p. 1504)

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Resources are those tangible and intangible assets that are tied semi-permanently to the company, (Maijoor and van Witteloostuijn, 1996). Resources are regarded as critical/strategic if they are unique (Wernerfelt, 1989) or rare, (Barney, 1986a). According to Wernerfelt, (1989), an analysis of a company's resources will reveal three categories of assets, namely fixed assets, blueprints and cultures. Fixed assets, which include equipment, plant and mining rights, have fixed long-run capacity (limited economic life) to generate wealth for the company. Blueprints have an unlimited capacity and include brand names, patents and copyrights. Cultures are shared values, organisational routines, in-house knowledge of technology, customer loyalty and trust between supplier and customer. They have limited short-run (they take time to develop) but unlimited long-run capacity (once developed, they offer long-term competitive advantage). They stem from team effects, whose functioning depends on the interaction between specialists in several areas, which in turn creates a set of organisational routines over time, (Wernerfelt, 1989).

Wernerfelt, (1989) argues that above average returns on investments in physical assets and blueprints are not sustainable because of imitation. Capabilities emanating from resources of a cultural nature, for example trust, customer loyalty or organisational routines that are dependent on tacit knowledge, can be 'grown' cheaply over time, yet the cost of imitation to other competing companies is prohibitive. Hence these resources represent a class of investments whose returns are at least partially shielded from competitive pressure, (Wernerfelt, 1989).

The characteristics of resources are seen as of paramount importance in the ability of resources to confer sustained competitive advantage. (Barney, 1986a) argues that resource should be valuable, rare, imperfectly imitable and imperfectly substitutable, while Grant, (1996) identifies durability, transparency, transferability and replicability of company resources as critical. The ability of a resource to produce rent depends on its scarcity and how valuable it is and the degree to which it is not imitable and substitutable by other companies, (Maijoor and van Witteloostuijn, 1996). Thus competitive advantage can be sustained as long as other companies cannot imitate the resources that give a company superior profitability. In other words heterogeneity of such resources, (Peteraf, 1993) enables a company to earn Ricardian rents, i.e. the returns to resources that confer competitive advantage over and above the real cost of the resources, (Grant, 1991).

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The more durable a resource is, the longer the company's competitive advantage. The durability of resources depends on their nature, technology-related resources being seen as having a short life span due to the increasing pace of technological change, and cultural-based resource being more durable, Grant, (1996). Peteraf, (1993) argues that heterogeneity of company resources on its own, is not sufficient for a sustainable competitive advantage, it should be durable. The durability of heterogeneity depends on *ex ante* and *ex post* limit to competition. Ex ante limit to competition contributes to a sustainable competitive position in that, without it, fierce competition among equally endowed companies for superior resource positions would lead to the anticipated returns being competed way. Ex post limit to competition is equally important in that subsequent to a company's gaining a superior position and earning rents, there must be forces that

limit competition for those rents, (Peteraf, 1993). Ex post limit to competition is assured by imperfect imitability and imperfect substitutability of resources of the company.

Transparency refers to the ease with which other companies can imitate a company's strategy. This dependence on competitors' ability to overcome, (1) the information problem, i.e. whether the rival companies have enough information about the capabilities that underlie the company's competitive advantage, and (2) the strategy duplication problem, i.e. the determination of the resources required to duplicate such capabilities. Geographical immobility, imperfect information, company-specific resources and the immobility of capabilities hinder transferability of resources and capabilities, (Grant, 1991).

Replicability of a company's resources by competitors is made difficult by the imperfect transferability of those resources and capabilities. Capabilities based on complex organisation routines are difficult to imitate because the routines are based on tacit rather than explicit knowledge, and are enshrined in the company's corporate culture. Grant, (1991), using just-in-time (J.I.T) and quality circles as examples of cultural assets among Japanese companies, concludes that, "...the co-operation and attitudinal changes required for their effective operation [i.e. J.I.T and quality circles] are such that few North American and European companies have introduced [them] either with the same degree of success as Japanese companies", (p.127).

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Dierickx and Cool, (1989) approach the issue of sustainable competitive advantage from a different perspective. They see the sustainable competitive advantage coming from the resources accumulation process, and not the characteristics of the resources themselves. Their argument is that critical or strategic resources are not acquired, but accumulated over time and it is this process of accumulation that gives them the potential to earn sustainable profits. Inimitability of the company's resources depends on the characteristics of the asset accumulation process, i.e. whether the process displays the following: time compression diseconomies, asset mass efficiencies, interconnectedness of asset stock, asset erosion, and causal ambiguity, (Dierickx and Cool, 1989).

Imitation of a company's resources and capabilities by other companies through a quick accumulation of such resources (massive investment in a short period of time, i.e. time compression), will lead to diseconomies. In other words, if a company has spent say, ten years to accumulate critical resources and capabilities, its investments in such resources would have been spread throughout the entire period. If other companies want to 'short circuit' the process by investing twice as much as the company did, in order to cut the period by half, time compression diseconomies occur due to diminishing returns. The imitation of intangible organisational resources particularly, is only possible through the same time-consuming process of irreversible investment or learning that the company itself underwent, (Collins, 1991).

The effect of asset mass efficiencies is to make the accumulation of more assets easier for a company due to the assets it has already accumulated. In other words, success breeds success, (Dierickx and Cool, 1989). The interconnectedness of asset stock makes it easier for a company to accumulate the stock of one asset in the sense that, the accumulation of that stock is subject to the levels of other stocks. This happens especially with complementary stocks. Asset erosion also plays a pivotal role in sustaining the competitive advantage of a company in that the ease with which an asset erodes encourages entry by other companies. Non-tradable assets are slow in decaying, (Dierickx and Cool, 1989), hence the more of their stock accumulated, the more sustainable the company's competitive advantage. Lastly, according to Dierickx and Cool, (1989), there is always uncertainty about the factors that enable a company to accumulate resources over time. As a result, causal ambiguity "..prevents would-be-imitators from knowing exactly what to imitate or how to go about it", (Peteraf, 1993; p. 182).

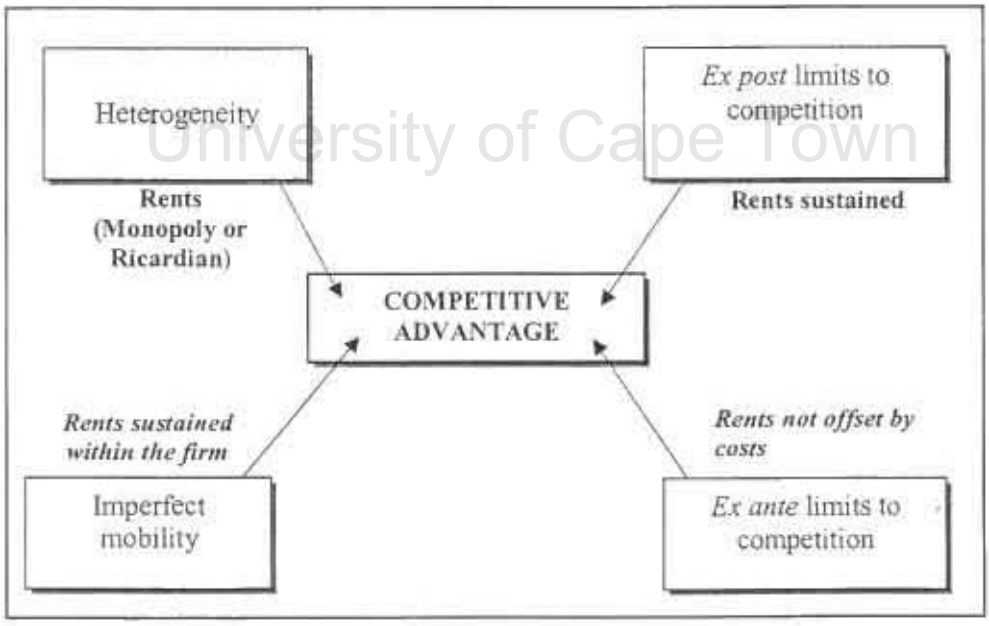
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Dierickx and Cool, (1989), conclude that strategic asset stocks are accumulated by choosing appropriate time paths (through relevant policies, investments, cultivation of an appropriate culture) of flows of resources over a period of time. While flows can be adjusted instantaneously (through investment/divestment), stocks of resources cannot, hence it takes a consistent pattern of resource flows to accumulate a desired change in

strategic assets. Consequently, companies become idiosyncratic because throughout their history they accumulate different physical assets. More importantly, they *acquire different intangible assets of tacit learning and dynamic routines*, (Collins, 1991) [emphasis added].

The tenets of RBT are therefore heterogeneity of a company's resources and imitability of those resources. Heterogeneity of resources comes from the scarcity of the resources and this enables the company to earn rents. However, the sustainability of the competitive advantage conferred by such resources comes from imperfect mobility as well as the imperfect imitability of the resources. Figure 2 below summarises the cornerstones of competitive advantage according to the RBT.

**Fig. 2 The cornerstones of competitive advantage**



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Source: Margaret. A. Peteraf, (1993). *Strategic Management Journal*, Vol. 14.

The utility of the RBT in explaining the creation of SCM relationships comes from the understanding that through collaborative practices, companies develop individual as well as common capabilities. Eisenhardt and Schoonhoven, (1996) state that SCM relationships are created by companies that are, either, in a vulnerable strategic position or in strong market position. Companies in a vulnerable strategic position for which they

need additional resources find collaboration with other companies as the answer. Those in strong market positions find SCM as a way of getting resources critical to know, attract, and engage partners.

Companies in collaborative SCM relationships can create sustainable competitive advantage through use of idiosyncratic yet at the same time complimentary resource combinations. Thus sustained competitive advantage depends upon how rare and imitable the resulting resources combinations of are, (Peteraf, 1993). Referring to Kogut, (1991) and Hansen *et al*, (1991), Lorenzoni and Lipparini, (1999) conclude that SCM relationships create competitive advantage through idiosyncratic complementary resource combinations between partnering companies, while the uniqueness and embeddedness of the companies' relational assets make imitation difficult.

Trust between supplier and customer as well as customer loyalty (Wernerfelt, 1989) are seen as unique resources that enable companies to earn sustainable profits, and at the same time inimitable. Companies form SCM relationships to take advantage of these resources through progressive intensification of inter-firm ties, (Lorenzoni and Lipparini, 1999). Intangible assets of tacit learning and dynamic routines, (Collins, 1991) exemplified by shared values, organisational routines, in-house knowledge of technology, (Wernerfelt, 1989), are immobile, presenting transferability problem between companies in an arm's length relationship. SCM relationships are a medium through which capabilities arising from such cultural resources (Wernerfelt, 1989) can be utilised by autonomous but interdependent companies to create a sustainable competitive advantage. Through collaborative practices, companies are able to accumulate and disseminate new skills and capabilities to reply promptly to changes in the competitive environment and end-use customer needs, despite conditions of path dependencies and core rigidities in technological and organisational processes, (Lorenzoni and Lipparini, 1999). This ability to quickly respond to the environment (called the dynamic capability) (Teece *et al*, 1997) enables companies to develop strategic manoeuvrings that are characterised by high response capability, reduced time-to-market and innovative capability, (Lorenzoni and Lipparini, 1999).

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### 2.5.5 Social exchange theory (SET)

The social exchange theory (SET) focuses on the factors that may lead to the availability of, and access to, alliance opportunities. SCM relationships are explained in terms of "....a social exchange process, in which the companies, conceptualised as collective actors... interactively increase their commitment to the relationship..", (Holm *et al*, 1999; p. 472). Economic actions of companies are therefore seen as embedded in social structure, (Uzzi, 1997), where a company's social connections (which create a social network) are seen as providing a guide in its interests in new alliances, (Gulati, 1998). A social network is defined as "...a set of nodes linked by a set of social relationships of a specified type", (Gulati, 1998; p. 295). Marsden, (1981), quoted in Gulati, (1998) defines embeddedness as:

> the fact that exchange and discussions within a group typically have a history, and that this history results in the routinisation and stabilisation of linkages among members. As elements of ongoing social structures, actors do not respond solely to individualistically determined interest... a structure of relations affects the actions taken by the individual actors composing it. It does so by constraining the set of actions available to the individual actors and by changing the dispositions of those actors toward the actions they may take, (p. 1210).

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In other words, new opportunities for alliances are presented to companies through their existing set of social connections. Where companies independently initiate new alliances, they turn to their existing relationships first for potential partners or seek referrals from them on potential partners.

The emphasis of SET is on conditions that determine the opportunity set that companies may perceive, (Gulati, 1998). Thus this view is different from the RBV and KBV, both which emphasise the competence side of the conditions that motivate companies to enter into alliances. The social networks within which most companies are embedded define and shape the strategic alliances and their outcomes. This is because economic actions are seen as being influenced by the social structure of ties within which they are embedded.

The proponents of SET argue that the social networks in which companies are embedded influence the formation of SCM relationships because of the differential informational advantages and the control benefits bestowed on companies by the networks, (Gulati, 1998). Trust that exists between embedded companies replaces the need for the calculative stance of risk-based judgements, (denoted by sceptical interpretation of another partner's motives when credible data are absent), by favourable interpretations of a partner's unmonitored activities, (Uzzi, 1997). Information exchange in embedded relationships is seen as more proprietary and tacit than the price and quantity data that are traded in arm's length relationships. Such information exchange includes strategic and profit margin, as well as tacit information that is acquired through learning and doing.

The governance structure in socially embedded companies is based on trust, unlike governance structures in arm's length relationships that are characterised by intensive calculativeness, monitoring devices, and impersonal contractual ties, (Uzzi, 1998). Companies form supply chain relationships where they are already socially embedded because the exchange relationship enriches the company's opportunities, access to resources and flexibility in ways that are difficult to achieve in arm's length relationships. The cosiness of the embedded companies allows fine-grained information transfer, (Uzzi, 1998) which:

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- increases scope of the partner companies options
- fuses information with truthfulness and meaning beyond its face value
- enhances the accuracy of the companies' long-run forecasts

The SET does not appear to offer different explanations from the KBT and the RBT as to why companies enter into supply chain relationships. This theory is more effective in explaining the process of entering into inter-company supply chain relationships. In other words, SET explains what facilitates the creation of SCM relationships and not the reasons for their existence. Companies are not socially embedded for the sake of it, but implicit in the social ties is the need for resources in their different forms, i.e. tangible and intangible.

### 2.5.6 Business network interdependence theory (BNIT)

The business network interdependence theory (BNIT) suggests that the coordination of activities between two partners in a business relationship can also take place in a wider business network context of connected relationships, (Holm *et al*, 1999). In this wider business context, a company is involved in a set of business relationships in which it coordinates its activities with those of its partners. The coordination of activities is therefore chain wide, i.e. two partners also coordinate their activities with suppliers of their suppliers and customers of their customers. Therefore interdependence in the focal relationship is also contingent on interdependence in the network, (Holm *et al*, 1999).

The BNIT explains the formation of SCM relationships in terms of opportunities that are available to companies in a network. Companies enter into supply chain relationships because of opportunities that would be available to them, afforded by more resources, knowledge and trust. Business partners in this relationship increase their commitment to the relationship when they see opportunities to coordinate their activities. The coordination of activities in the network is facilitated by mutual commitment by all supply chain partners, which in turn initiates and fosters mutual dependence. The result of the relationship is a supply chain that is effective is meeting customer needs, which translate into value creation for the end-use customer.

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### 2.5.7 Summary of theories

The KBT, RBT, SET and BNIV have one thing in common: they are concerned about resources that companies will have at their disposal once they join hands in a supply chain. What is different is the emphasis each of the theories places on the different forms of the resources that give companies in a supply chain a sustainable competitive advantage.

The KBT emphasises knowledge resource, (both tacit and explicit) as the most important resources that attracts companies to work together in a supply chain. The RBT goes a step further and looks at resources that are physical (e.g. land, buildings machinery), intangible, (e.g. patents, copyrights) and cultural, (e.g. tacit knowledge, organisational

routines). The SET emphasises tacit knowledge (passed form one company to another through fine-grained information transfer) and trust – a resource that can only be exploited when companies have an intimate relationship. Lastly, the BNIT is concerned with both intangible and tangible resources that entice companies to enter into trust-based, long-term relationships. Therefore, the goal of companies for creating these virtual enterprises is the same: the ability to meet customer needs in a leading, cutting edge way. This is achievable and sustainable through the use of superior resources that are not found in arm's length relationships but that exist in supply chain relationships.

Thus competitive advantage is conferred by the combination of idiosyncratic knowledge and unique resources that are of a cultural nature. This is achieved in the context of existing social ties and business network. The nature of resources and knowledge that offer long-term supply chain competitive advantage require the creation of a customer centric supply chain strategy that spans the entire value chain of a product, where trust, information sharing and collaboration are the building blocks of the relationship.

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## 2.6 Sub-problem 6

*What formation and developmental processes are involved in supply chains?*

### 2.6.1 The Formation processes and development of inter-company supply chains

The formation of supply chains entails the decision to enter into alliance, the choice of an appropriate partner, the choice of the governance structure of alliance, and the dynamic evolution of the alliance as the relationship develops, (Gulati, 1998). The initial step in the formation of a supply chain relationship is for a company to assess its strategic needs that can be satisfied by being in a supply chain relationship. Once that is done, the next step is partnership selection. This step is critical because the issue of compatibility is profound. This is because, if the relationship is to succeed, it needs to be conceived of as a strategic goal - one that will take serious work to achieve and maintain (Vollmann and Cordon, 1998; p. 688). True partners are seen as those whose goal is to own the future together, sharing profits and losses, knowledge and resources, bound by the shared destiny principles of partnership. A model suggested by Scott and Westbrook, (1991)

consists of three stages that companies go through in establishing an integrated supply chain. Stage one involves mapping: the analysis of lead times and inventory levels throughout the supply chain. This enables the companies along a product/service supply chain to assess the competitiveness of the entire supply chain, as well as identify potential improvements that can be undertaken. The second stage entails positioning the supply chain: the identification of opportunities for collaboration among companies along the supply chain.

Lastly, stage three involves the selection of action: companies along the product/service supply chain select, from among a plethora of alternatives, the best way of achieving competitive advantage against other supply chains. Supply chain partners have to agree on how they will share the fruits of the virtual enterprise. In other words, there has to be some agreed way by which every member of the supply chain shares in the success of the entire chain. This issue gives rise to discussions about the margins that each partner will have. The issue of pie sharing is seen as a periodic decision that is made by high level organisational members based on some mutually agreed formula, (Vollmann and Cordon, 1998).

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Performance evaluation that mirrors the strategic intent of the supply chain relationship is critical for the success of the relationship. The measures adopted for performance evaluation should influence employees across the supply chain to behave in a way that supports the strategic intent of the chain. Performance measures that encourage individualism are not compatible with supply chain strategies because teamwork is more important than individual work. The formation of multi-disciplinary teams as well as inter-company teams brings to the fore the need to foster team spirit. Thus new performance measurement systems that focus on the overall effectiveness of the supply chain such as the time to market, obsolescence, final customer complaints, damage, the flow time for cash to come back, the flexibility of the overall chain to changes in demand, security/safety, return on assets, mark downs, times to process transactions, hidden factory costs, environmental variables and rates of learning, are required (Vollmann and Cordon, 1998; p. 693). Some of these variables cannot be measured with precision, but

Vollmann and Cordon, (1998) argue that it is better to be approximately right than to be exactly wrong. Table 2 below gives a summary of integral components of SCM strategic alliance processes, namely creation/strategic issues, maintenance/relationship issues, and performance/evaluation issues, Buono, (1997; p.255).

**Table 2.2 Supply chain management strategic alliance processes**

| Partnership strategy/ Creation issues | Partnership maintenance/ Relationship issues | Partnership evaluation performance/Outcome issues |
|---|---|---|
| Clarity of strategic objectives and inter-company expectations | Attention to inter-company communication, understanding, trust-building and fairness | Measurement against mutually agreed goals and targets |
| Mutuality of business needs of partners | Sharing and accuracy of information, and timeliness of feedback between partners | Problem solving: decision processes, resource availability, inter-company co-operation |
| Mutuality of inter-company need(s) of partnership | | |
| Relative core competences: own and partner's | Partnership champions: existence, visibility, effectiveness | Protection of core competences: own and partner's |
| Strength of top management Support, commitment and Direction | Unwritten expectations associated with legal agreement | Clarity and effectiveness of work flow: appropriateness of inter-company linkages, shared ways of operating, areas of improvement |
| Extent of mutual incentives/ profit | Sense of team work between partners | |
| Partnership control/degree of parity between partners | Degree of inter-company commitment to partnership | |
| Appropriateness of alliance structure/architecture | Availability of appropriate technical assistance | |
| Flexibility/adaptability to emerging opportunities and threats | | |

*Source: Buono, (1997)*

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As shown in table 2 above, the success of the alliance between supply chain partners is based on three intervention strategies; the partnership strategy creation, partnership maintenance or relationship, and partnership evaluation or performance strategies. Partnership creation or strategic issues entail choosing the right partner in terms of complementary competences, technology and values, responsiveness, stable financials,

and ability to develop trusting relationships, Buono, (1997; p.257). The maintenance of the relationship issue is very important in inter-company SCM because of the interdependence of the companies in processes required to produce goods/services to satisfy the customer. Managers who perform interdependent functions are in different companies and locations, which may lead to misunderstandings, breakdowns in communication and performance, (Buono, 1997).

Thus it is important that the integration processes between companies along the supply chain support mutually agreed outcomes, coupled with clear communication and understanding among all the companies that interactions between them are above-board, fair and ethical, (ibid). There should be a belief that all supply chain partners are doing what is best for the entire supply chain, that the disparate business interests of partners are complimentary hence contributing to the mutual agenda of the entire supply chain, that there is trust, openness and honesty, teamwork and the feeling of ownership among all supply chain participants, and cultural fit reinforced by the belief that each partner's employees are committed to the shared supply chain values.

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Assessment or performance issues include a number of assessment criteria like quality, on-time delivery, accounts payable considerations, manufacturing expertise, purchasing assistance, and overall responsiveness, (Buono, 1997). For these assessment criteria to work well, there is need for mutual recognition of the need to communicate them throughout the supply chain through regular meetings between supply chain partners as well as progressive reviews. A clear understanding of who is in charge of what, is critical for the success of these measures because supply chain partners need to know who to go to when problems occur. These measures also require that information sharing is not hampered by fears of being 'too open'. Supply chain partners therefore mutually commit themselves to protecting proprietary information across the supply chain, which brings into play ethical business dealings and company reputation. Once supply chain partners are assured that they are trading their proprietary information in a safe environment, they are prepared to have a cosy relationship where mutually agreed goals and targets are pursued.

## 2.7 Sub-problem 7

*What are the barriers to, and enablers for, implementing supply chain management?*

### 2.7.1 Obstacles to optimising performance in SCM

SCM has the potential to allow supply chain partners to achieve competitive advantage and improve their bottom-line. However, a recent survey conducted by Cap Gemini Ernst & Young and IndustryWeek (2000) revealed that companies fail to take advantage of the potential of SCM due to pricing pressures, poor communication, lack of supply chain leadership, lack of knowledge and training, corporate philosophical differences, lack of trust, and technological incompatibility, (p. 8). In this survey, pricing pressures and poor communication were the most common hindrances to the optimisation of the supply chain.

Lack of supply chain leadership and knowledge and training were identified as the second most common obstacles to achieving competitive advantage throughout the supply chain. Without a clear supply chain strategy and leadership, supply chain issues are regarded as operational and are therefore relegated to lower-level personnel. Also without knowledge and proper training to equip employees with the right skills to deal with supply chain issues, it is difficult to achieve integration across the entire supply chain. The problem is worsened by managers who may not specifically recognise what their companies' competencies are, and what their customers perceive as their products'/services' future order-winning characteristics, (Stuart and McCutcheon, 2000). Consequently, a company may maintain certain competences that do not add value, with the effect of hindering value creation in the supply chain. Michael Hammer[8] argues that, work in the supply chain, should be done by a partner who is in the best position to do it, not necessarily by the supply chain partner who directly benefits from the work, for instance Vendor Managed Inventory (VMI) in the retail sector. Alternatively, a company may outsource technologies that prove to be its key area of competitive advantage. The

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[8] In Quinn, (1998), Reengineering the Supply Chain: An Interview with Michael Hammer, *Supply chain management Review*, Fall, 1998.

loss of control of a company's competitive advantage has the obvious consequences of weakening the whole supply chain because *a chain is as strong as its weakest link.*

Lack of trust translates into lack of collaboration, because without trust there is no information sharing. Without collaboration supply chain partners cannot take advantage of the synergetic benefits from combining their competencies across the supply chain. Lack of collaboration can also be worsened by corporate philosophical differences (differences in corporate culture) which make integration across the chain difficult. Suppliers and/or their customers may feel that their potential partners want to impose cultural adjustments, leading to implementation difficulties. Stuart and McCutcheon, (2000) cite the problems that General Motors had in attempting to have a trust-based supply chain relationship with its suppliers. This was due to a long history and established culture of adversarial relationships with its supply community, (p. 43).

Added to these difficulties is technological mismatch that may exist between companies in the same product/service value chain. Stuart and McCutcheon, (2000) argue that suppliers and their customers may have their own technology strategy and different views about the merits of a potential relationship. Therefore, even though SCM is being highly regarded as a strategic response to the current turbulent global environment, not all companies that have implemented it have been successful, and many companies have not embraced it due to the (real and perceived) implementation difficulties.

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### 2.7.2 Ways of overcoming obstacles

The obstacles to supply chain optimisation are ameliorated by, among other things, a clear supply chain strategy and leadership, the cultivation of the appropriate attitudes and culture, and total commitment to the relationships throughout the chain. Aligning the overall supply chain strategy to each company's business unit's strategy, coupled with collaboration between multiple trading partners, yields a synchronised supply chain, which leads to the maximisation of customer value, and ultimately the value of each supply chain partner, (Anderson and Lee, 1999). The issue of supply chain leadership is critical because without support from top management, SCM is regarded as a tactical

issue, leading to failure. As such, senior executives must clearly understand what supply chain management is all about, and how success can be achieved. This way supply chain strategy becomes part of the new culture shared by all partners, a factor that goes a long way in establishing common values, behaviours, and beliefs throughout the supply chain.

The issue of collaboration (or lack of it) needs to be taken a step further than what Anderson and Lee (1999) call "joint participation" where supply chain partners focus primarily on a one-to-one, and/or transactional relationship. Moving away from these tactical aspects of collaboration implies more than sharing information like sales, marketing, and production so as to improve the flow of product through the supply chain. Anderson and Lee, (1999) argue that companies should implement jointly designed, strategic, extended enterprises, that involve mapping supply chain flows, structures, asset deployment, and responsibilities, with a proper allocation of risks and rewards, (p. 5).

Trust by customers can be enhanced by attributes such as deliverability, quality, service and agility, and reliable forecasting and the sharing of critical information, on the part of suppliers. Supply chain partners must rely on a high level of *reciprocal* goodwill trust in order to optimise the supply chain, (Stuart and McCutcheon, 2000) [emphasis original]. They argue that reciprocal goodwill trust allows collaborative relationships that are not governed by contract to be undertaken because partners are not worried about opportunistic behaviour. Exchanging critical technical resources, sharing confidential technology forecasts and drawings, collaboration on strategic plans and long-term product forecasts, and exchanging sensitive financial information, create such goodwill trust (ibid; p. 41).

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Others suggest an "open book policy" as a way of engendering trust between supply chain partners (Anderson and Lee, 1999; Cullen *et al*, 1999). This entails sharing mainly financial information about a company's cost structure and performance metrics with managers outside a company's corporate boundaries. The open book policy is an intra-company as well as inter-company trust-enhancing strategy. Within the company, multi-functional teams are given unrestricted access to information, and between companies,

multi-disciplinary, inter-company teams are also given unrestricted access to sensitive information. Thus both suppliers and customers must expose themselves to situations where the other party might act opportunistically, thereby allowing the other party to demonstrate its trustworthiness by *not* taking advantage of such situations, (Stuart and McCutcheon, 2000).

Corporate cultural problems can be overcome by focusing on attitudes and behaviour through the realignment of performance measurements and rewards to mirror the strategy of the entire supply chain. The nature of performance measures used must be clearly understood by employees. The collective responsibility of all supply chain partners for revenue growth, asset utilisation, costs and service level, requires that value be defined in terms of a "win-win" situation, where rewards are equitably shared and costs fairly distributed, (Anderson and Lee, 1999). In terms of attitudes, a sense of responsibility, a customer focus, and a self-starter, are characteristics that should be found among companies and their employees along the supply chain of a product/service. Anderson and Lee, (1999) also argue that on the knowledge side, employees should have an understanding of the entire business, i.e. the value proposition the company is offering the customer, what the customer needs, the nature of competition, and the company's cost structure. The skills required among supply chain employees include problem analysis, problem solving, decision-making, teamwork and an appropriate incentive structure.

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### 2.8 Sub-problem 8

*What are the implications of supply chain management on the business landscape and on management accounting?*

#### 2.8.1 Implications of supply chain management on the business landscape

The formation of supply chains implies that businesses can no longer stop at their formal boundaries when looking for the answers to business challenges and the factors that affect profitability and performance. Success now depends on the companies' ability to control what happens in the value chain outside their own boundaries (Magretta, 1998). In other words, the answers to business challenges now lie in the virtual enterprise (the

supply chain), which comprises all members of a company's supply chain, including the different suppliers and their suppliers, customers and their customers. The focus of these relationships is on creating synergy in the overall chain; thereby achieving greater benefits than a single entity could, acting independently (Johnston and Lawrence, 1988; Vollmann and Cordon, 1998). Also focusing beyond corporate boundaries enables companies to recognise serious threats that lie elsewhere in the supply chain. Companies are thus in a position to monitor competitive dynamics throughout the supply chain and work together to fix weaknesses wherever they occur (Johnston and Lawrence, 1988).

The importance of purchaser–supplier relationship for achieving competitive advantage (Harland, 1996; Stuart, 1997) is now receiving increasing attention in today's business environment (Pick, 1999). Johnston and Lawrence, (1988) report that, for decades, vertically integrated companies have been reaping the benefits of their size. However, "...the elephants [vertically integrated companies] aren't grazing so freely anymore. Another beast [supply chains] has been nibbling at the herbage, and its presence is beginning to be felt," (Johnston and Lawrence, 1988; p. 94).

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Magretta (1998) supports this view by saying that the management of this relationship "... is working its way onto the strategic agendas of CEOs [Chief Executive Officers] in an expanding list of industries, from autos to personal computers to fashion retailing," (p. 103). Hence inter-company supply chain relationships are a "hot" item in today's management discussions, (Vollmann and Cordon, 1998; p. 684). The idea here is that business relationships between suppliers and customers imply that they co-ordinate a number of exchange and production activities in a way that increases their interdependence, thereby raising their joint productivity and creating value (Holm *et al*, 1999). Value creation is seen in the context of satisfying the customer. Chakraborty (1999) argues that competitive advantage comes from being value driven through the understanding of how customers perceive a company's performance against that of its competitors. In today's environment, customers want the best, i.e. they seek to derive greater value for their money.

### 2.8.2 The implications of SCM on management accounting

The emergence of SCM on the global market represents a paradigm shift in that it entails a completely different organisation structure, culture, attitudes, skills, and knowledge. The organisation structure has changed from a single company having a market-based, arms-length relationship with suppliers and customers, to one where all the parties belong to one family, *the supply chain*. Instead of confrontation, there is now collaboration. The operational focus of companies has changed from functional, to processes, and the emphasis is now on the profitability of the entire supply chain through the creation of value for the end-use customer. These changes present challenges to the way management accounting fits within the new business dispensation where the focus of companies is now beyond the boundaries of a single organisation, (Shields, 1997). A review of research in management accounting by North Americans in the first seven years of the 1990s done by Shields, (1997), revealed that only three out of 152 studies looked at inter-organisational settings and he concludes that there is a need to describe novel or innovative management phenomena, or settings in which they exist, for instance supply chains.

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The emergence of supply chains, as opposed to a single organisation having a market-based arms-length relationship with customers and suppliers, has an impact on the nature and use of management accounting. The nature of management accounting information required to support supply chain strategies and operations may be different from that which satisfies companies "doing it alone" because of differences in their activities and decision settings. Changes in the organisational structure require a change in the information needed as well as the way it is used to measure and motivate employees' performance, (Atkinson, 1997). This research is placed within the framework of novel organisational settings (supply chains). Its focus is on how management accounting, with emphasis on strategic cost management, supports the activities and decisions of companies along a product's supply chain in the process of creating value.

## 2.9 Conclusion

Supply chain management has taken centre stage in recent years as a result of companies fighting for market share and profits. The recent interest in supplier-manufacturer relationships also reflects a wider interest in collaboration as trading companies have moved from adversarial to more co-operative relationships. Thus SCM has become a central strategy for companies within the entire value chain of a product/service in a wide range of industries. These supply chain relationships are motivated by the need to achieve production efficiency, share research and development risks, gain access to new markets and skills, achieve time compression in the development of new products and services, and by the search for new technological opportunities in the global environment. This is in response to the exacting demands of end-use customers who can now access goods and services from other parts of the world so easily with the help of the Internet.

However, for SCM to succeed, it must be treated as a matter of strategic importance, and must also be supported by top-level executives. It should be based on long-term commitment, collaboration, trust, information integration, and organisational linkages that create a chain that is responsive to the needs of end-use customers. Through collaborative practices between supply chain partners throughout the entire supply chain, companies aim to lower the total amount of resources required to meet end-use customer needs through operational efficiency and cost reduction. The ability of the supply chain partners to synchronise the requirements of customers with the flow of materials from suppliers of suppliers, results in the significant reduction in inventory investment in the entire supply chain, and an increase in customer service due to the availability of goods and services at the right place, time, price and quality. The whole process allows companies along the product's supply chain to build a competitive advantage for the entire supply chain and create value for both the end-use customer, as well as for the partners themselves. Value creation in SCM is the subject of the next chapter.

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# CHAPTER THREE

## VALUE CREATION

### 3.0 Introduction

This chapter deals with value, its nature and how it is created through supply chain management. SCM is expected to create value for the end-use customer as well as the companies that make up the supply chain. The chapter explores value and value creation from the point of view of the end-use customer as well as the companies that constitute the supply chain by answering sub-questions 9 and 10. A model that depicts the value creation processes through value drivers is then presented.

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### 3.1 Sub-problem 9

*What are the definitions of value associated with supply chain management?*

#### 3.1.1 Definitions of value

Value is variously defined depending on the context of use. In the context of SCM, value can be defined in terms of benefits that accrue to the companies along the supply chain (Mevellec and Lebas, 1999; Walters and Lancaster, 1999) and to the end-use customer, (Bromwich, 1990; Walters and Lancaster, 1999).

#### 3.1.2 Supply chain partner value

Supply chain partner value is also known as relationship value (Holm *et al*, 1999) because it is derived from the relationship that exists between supply chain partners. It is the existence of the relationship that creates a "value creating" system in which companies along the supply chain co-produce value (Barney, 1996). This type of value is the result of a decrease and/or increase in the companies' costs and revenues, respectively. The value generated for the companies along the supply chain is also

referred to as shareholder value, which is defined as the returns that fully compensate investors for the total costs involved in the investment, plus a premium which more than compensates for the additional risk incurred, (Christopher and Ryals, 1999; p. 1).

SCM is seen as having an important role in shareholder value creation in that it helps in identifying opportunities for reducing total cash-to-cash cycle and enables companies along the supply chain to be responsive to customer needs through close connection with the marketplace. Also, through leveraging the skills and competencies of individual supply chain partners in a coordinated and market-focused way, synergetic benefits can be reaped. Value that accrues to companies along the product/service supply chain can therefore be expressed in terms of quantifiable benefits that arise from operational efficiency and cost reduction.

### 3.1.3 End-use customer value

Value may also be defined from the end-use customer's perspective, i.e. the appreciation and valuation of various attributes of a product or service by the end-use customer, (Bromwich, 1990; Mevellec and Lebas, 1999). Defining customer value in terms of what the product or service gives the customer, i.e. in terms of the product/service characteristics, attributes, mode of delivery and support services, (Bounds *et al*, 1994), makes it clear that it is the customer who determines value, not the organisation providing the product/service, (Landry and Chan, 1999). It is the perceived utility of the product/service by customers, (Mevellec and Lebas, 1999) which makes customers regard the product/service as worth paying for, i.e. the "got" for customers, (Chakaraborty, 1999).

End-use customer value is seen as a function of precision in product functionality, product guarantee, convenience of placing orders, product delivery/length of order cycle, adaptability to market and customer needs, cost effectiveness in the design and delivery of capabilities, product availability in terms of quantity, quality and price, timeliness and consistency in delivery, (Harker and Hunter, 1995; Langely and Holcomb, 1992; Bakar and Majid, 1999). Walters and Lancaster, (1999) regard end-use customer value as being

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determined by; "the utility combination of benefits delivered to the customer less the total costs of acquiring the delivered benefits," (p. 643). Understanding customer value and hence the ability to create it requires recognising that customer value derives from much more than using a product or service, but from each aspect of the use process, (Landry and Chan, 1999). Focusing on end-use customer value is therefore recognition of the fact that providing value to customers is the key to serving all other stakeholders in the long run, (Landry and Chan, 1999).

### 3.2 Sub-problem 10

*How is the value associated with supply chain management created?*

#### 3.2.1 Value creation along the supply chain

SCM is seen as an effective way of creating value in that companies share an unbound structure of independent activities, (Holm *et al*, 1999) that allow them to respond quickly and accurately to the changes and demands in the market. The tight integration between companies along a product's supply chain facilitates a flexible, fast response to "pull" systems that rely on customer demand to trigger movement through the logistics system. Thus companies in a supply chain relationship are able to meet customers' needs faster and more efficiently than where companies have an arms length relationship. Focus and specialisation in a tightly co-ordinated supply chain enables companies to collect comprehensive, accurate and timely information that is critical in satisfying their customers. All these factors impact on value drivers, namely customer service, working capital efficiency, operating costs and fixed capital efficiency.

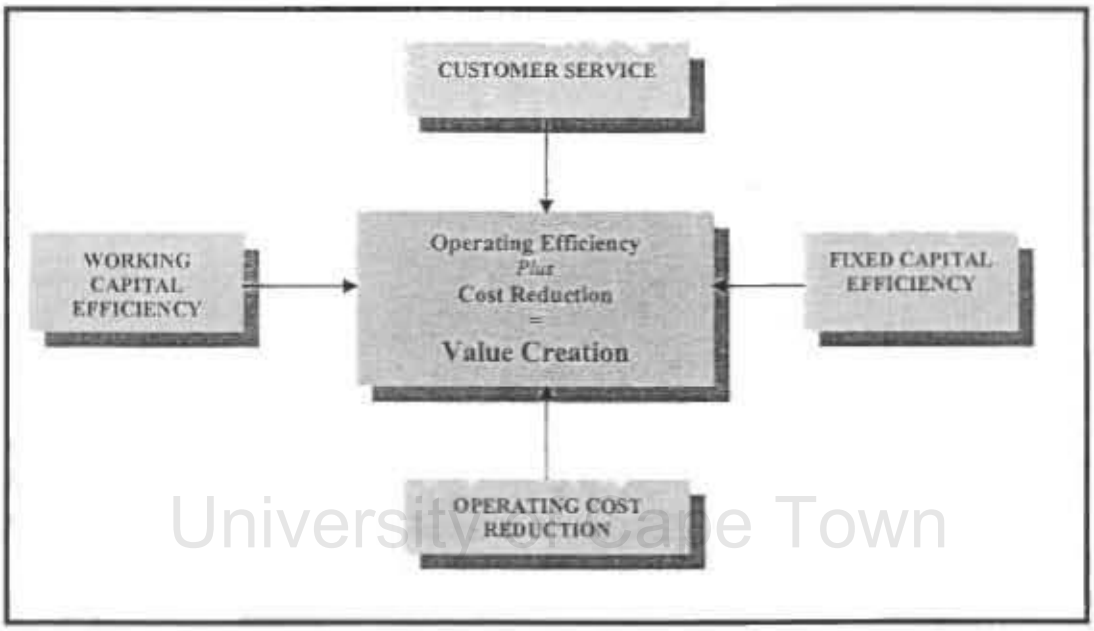
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#### 3.2.2 Value creation along the supply chain through value drivers

An integrated supply chain has the ability to; enhance revenue growth through improved sales volumes and customer retention, reduce operating costs of the entire chain, improve fixed capital efficiency, and increase working capital efficiency, (Christopher and Ryals, 1999). The overall impact of these improvements leads to the creation of value for the companies along the supply chain as shown in **Figure 3** below.

As shown in figure 3 below, value creation along the supply chain is the result of a combination of customer service, operating cost reduction, working capital efficiency and fixed capital efficiency. Value is therefore a preferred combination of benefits compared with their acquisition costs (Walters and Lancaster, 1999).

**Fig. 3 Value creation along the supply chain**




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*Adapted from Christopher and Ryals, (1999). The International Journal of Logistics Management*

### 3.2.2.1 Customer service

An integrated supply chain has the ability to achieve high levels of customer service, which in turn impacts on the sales volume and customer retention. Both these factors result in the improvement of revenue growth. Citing Anderson, Claes and Donald, (1994), Christopher and Ryals, (1999) argue that there appears to be a direct relationship between customer service and sales. Good customer service in terms of accurate (i.e. the right quality and quantity) and timely order fulfillment, have the effect of increasing sales volume. Christopher and Ryals, (1999) also argue, citing Compaq that reported lost sales of between half a billion dollars (US) and one billion dollars, that the effect of out-of-stock can be profound to a company's bottom-line.

Customer retention has the effect of increasing revenue in that satisfied customers continue doing business with a company, and as they grow, the orders they place also grow. However, customer retention is subject to the reliability and responsiveness of companies. An integrated SCM has the ability to enable companies to increase their sales volume as well as retain customers. Through information integration and supply chain coordination, companies along a supply chain can plan close to the market, which increases the flexibility and responsiveness of the supply chain, which in turn lead to greater customer satisfaction. Satisfied customers are likely to repeat their orders, which results in customer retention.

#### 3.2.2.2 Operating cost reduction

A total-picture view of supply chain costs is required to deal with operating costs (Chandra and Kumar, 2000). Hence the focus of companies along a product supply chain should go beyond the usual transportation, storage, handling, and order processing within a company, (Christopher and Ryals, 1999). An end-to-end approach to cost reduction is facilitated by an integrated supply chain, where companies focus on reducing costs from the initial suppliers right down to the final customer. SCM also enables time compression (i.e. shortens the time it takes to satisfy end-use customer needs, e.g. in a build-to-order manufacturing strategy, Chandra and Kumar, 2000), and improved planning and forecasting (McLaren *et al* 2002), both which remove non-value-adding activities and eliminate waste, which in turn reduce costs throughout the supply chain.

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#### 3.2.2.3 Fixed capital efficiency

The flow of goods throughout the supply chain is fixed asset intensive in the form of distribution centers, trucks, and automated handling systems, (Christopher and Ryals, 1999). These fixed assets involve huge capital outlay, which depresses return on investment (ROI). A rationalization on investment in fixed assets is thus required because the true cost of financing them is sometimes more than the return they generate, (ibid). SCM offers opportunities for rationalizing investment in fixed assets along the entire supply chain the through collaborative practices such as Vendor Managed Inventory, shared warehouses (Chandra and Kumar, 2000; Lee, 2000), inter-company investments

(Christopher and Ryals, 1999), and outsourcing (made possible by a focus on core competencies, see Zhu *et al*, 2001 and Jennings, 2002). Thus the burden of investing in fixed assets is spread among companies along the supply chain. Also, duplication of resources is avoided by focusing on the entire supply chain and only making investments that are required to ensure the proper functioning of the supply chain. This results in a lower fixed capital investment, which in turn improves return on investment.

#### 3.2.2.4 Working capital efficiency

Christopher and Ryals, (1999) argue that order fill and invoice accuracy directly impact on accounts receivable and procurement policies, both which affect cash flow. SCM has the potential to significantly reduce working capital (in form of debtors and stock) through faster time-to-market (Chandra and Kumar, 2000) and time-to-volume throughout the supply chain. The result is not only increased market share, but also a reduction in cash-to-cash cycle time, i.e. the elapsed time from procurement of materials or components through to sale of the finished product. SCM enables companies along the product's supply chain to eliminate non-value adding time and activities, which results in a reduction of working capital. Also an integrated supply chain facilitates the sharing of information between partners such as production, purchase order, sales order, new product development, sales forecast and distribution information, (Cap Gemini Ernst & Young and IndustryWeek, 2000; Chandra and Kumar, 2000). The sharing of such information enables companies along the supply chain to replace inventory with information, which in turn significantly reduces inventory levels held throughout the chain (Chandra and Kumar, 2000).

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Value creation is therefore a function of value drivers that impact positively on operational efficiency and cost reduction, both which create value for all companies along the supply chain. The ability of companies along the supply chain to generate value for themselves is derived from the extent to which they effectively exploit value drivers. The extent to which value drivers can be effectively exploited is subject to the magnitude of supply chain integration, which entails collaborative practices such as information sharing, trust, mutual commitment and mutual dependence.

It is important to note that the process of connecting business processes, developing mutual commitment and dependence and the resultant value created are not mutually exclusive. Each step reinforces the preceding and the subsequent links as each company along a product's supply chain learns more about the capabilities and practices of the other. Leverick and Cooper, (1998) summarise the whole process as:

> Here, an openness to organisational learning is of particular importance, as supplier or manufacturer comes to recognise that there is not necessarily one "correct way" of doing things, as is the need to take something of a "step-by-step" approach, building partnerships gradually as familiarity and trust between companies increase (p. 78).

Thus the process of integration takes time as it goes through the "....progressive abandonment of a conventional governance, and the progressive investment on the relational side of the exchange," (Lorenzoni and Lipparini, 1999; p. 331). Companies gradually increase their mutual dependence by making mutual commitment intended to continue and develop the relationship, (Holm *et al*, 1999). It can be concluded that the critical issue is to "...build and sustain mutual commitment which enables [all] partners to engage in value-creating co-ordination of interdependent activities. Building mutuality is a matter of exchanging incremental commitments in order to form a balanced dependence relation with value creation potential for [all] partners," (Holm *et al*, 1999; pp. 479-480).

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It follows from the above that value creation along the supply chain is a result of exploiting value drivers, supported by business connection, mutual commitment and dependence reinforcing each other. In other words the 'marriage' does not follow the processes of commitment and dependence one after the other. In the process of commitment, mutual adjustments in production, logistics, development and administrative activities are necessary (Hallem *et al*, 1991). The purpose of these adjustments is to achieve a better match between the companies along the product's supply chain (Holm *et al*, 1999). Thus through such adjustments, mutual dependence between companies along the supply chain is simultaneously achieved, resulting in value creation.

This research looked at the value created for supply chain partner companies through cost reduction and operating efficiency. For practical reasons, this research did not focus directly on end-use customer value because of the difficulties involved in measuring it. Measuring end-use customer value is problematic because it is highly subjective, difficult to put measures on, and also requires surveying thousands of consumers. Due to time constraints, it was not feasible to conduct such surveys for the purposes of this research. However, the end-use customer value creation was captured indirectly through the strategies that are employed by companies along the supply chain, since their survival can only be assured if they create value for the end-use customer.

### 3.3 Conclusion

Collaborative practices in an integrated supply chain enable companies to embark on value creation through the synergies from, and improvement in intra- and inter-company processes along the supply chain. The improved processes impact positively on value drivers, namely customer service, working capital efficiency, operating cost reduction, and fixed capital efficiency, which in turn create value for companies along a product supply chain. Information is critical to all the operations of a supply chain, hence an information system, like management accounting, is expected to play an important role in supporting the strategic intent of the entire supply chain, i.e. creating value for the end-use customer as a way of creating value for all supply chain partners.

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The need for information to support value-creating initiatives throughout the supply chain is critical because not only is information sharing a pillar for success, the nature of information generated for use is also profound. Thus companies along the supply chain require the contribution of ideas and information from management accounting (as an information system). The next chapter deals with management accounting, with emphasis on strategic cost management, and its potential to support value creation in the context of supply chain management.

# CHAPTER FOUR

## MANAGEMENT ACCOUNTING

### 4.0 Introduction

This Chapter deals with the potential of strategic cost management to support value creation along the supply chain. The debate that has been raging since the late 1980s regarding the relevance of traditional management accounting techniques and practices, and the potential usefulness of advanced management accounting is presented as the backdrop to the discussion of strategic cost management. Thus literature on both traditional and advanced management accounting techniques and the extent to which these techniques and practices can support strategic cost management is presented as a background to the discussion of strategic cost management. The potential of strategic cost management to support value creation along the supply chain is then explored and a theoretical framework is constructed, showing how strategic cost management can support value creation in the context of supply chain management. In order to deal with the above issues, this chapter answers research sub-problems 11 to 13 in the following sections.

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#### 4.1 Sub-problem 11

*What are the definitions of management accounting?*

#### 4.1.0 Background

#### 4.1.1 Accounting: Definitions

Accounting is an information system that enables companies to formulate overall strategies and long-term plans, allocate resources, control their operations, measure and evaluate the performance of employees, and meet external regulatory and legal reporting requirements, (Horngren *et al,* 1999). The last function is the domain of financial accounting, while the first four requirements are met by management accounting. The focus of this research is on management accounting because it is an accounting system that provides management with information for decision-making in the process of fulfilling the goals of an organisation.

### 4.1.2 Management accounting

Management accounting has been variously defined over the years. As early as the 1960s, management accounting was defined as:

> the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by the users of the information.[9]

More recently, CIMA provided a more comprehensive definition as follows:

> the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information used by management to plan, evaluate and control within an entity and to assure appropriate use of and accountability for its resources.[10]

Management accounting is therefore an information system that provides information for (1) costing products, services and other objects of interest to management, (2) planning, controlling, evaluation, and continuous improvement, and (3) decision-making, (Hansen and Mowen, 2000; p. 4). These definitions are primarily concerned with the use of financial or economic information to facilitate management decision-making. Scapens, (1999) argues that such a narrow micro-economic perspective of management accounting does not reflect the position of management accounting in the organization. He advocates a broader approach that locates management accounting within the broad dimensions of the business which recognises both the economic and other organizational roles of management accounting (p. 2).

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Horngren *et al,* (1999) take a broader view of management accounting by saying that it "measures and reports financial information as well as ***other*** types of information that assist managers in fulfilling the goals of the organization" (p. 2) [Emphasis added]. Drury, (2000) also points out that management accounting is concerned with both *financial* and ***non-financial*** information that will help decision makers to make good decisions, (p. 3, emphasis added). The differences in the definitions indicate the development of management accounting over the years such that it now comprises two broad categories, namely traditional management accounting and advanced management accounting.

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[9] American Accounting Association, 1966.
[10] See CIMA, 1996 (p. 15).

## 4.2 Sub-problem 12

*What are the characteristics of management accounting?*

### 4.2.1 Traditional management accounting (TMA)

The main features of traditional management accounting are standard costing, budgetary control, variable and absorption costing, job-order and process costing, cost-volume-profit analysis (with its static view of fixed costs as being constant within a relevant range of production, and not driven by activities), and the application of overheads to products based on labour hours, units of production and machine hours. These techniques serve and support responsibility accounting through for example, standards costing variance analysis, budgetary control and overhead allocation. Thus control and accountability are achieved through responsibility accounting, which involves the division of an organisation into separate areas under the responsibility of individuals who are offered incentives for meeting budgets and other goals set for their areas, (Scapens, 1999).

Responsibility accounting gives emphasis to the role of individual business units, departments, sections, groups as well as individual personal responsibility and accountability for the activities of the business. At the helm of the business unit is a manager who has overall responsibility for the unit, and below him/her are subordinates, who are responsible for the performance of their departments or functions, (Scapens, 1999). Profit- and investment-oriented financial performance measures are mostly used, e.g. return on investment (ROI). These accounting measures are both *ex ante* (standards) and *ex post* (actual). *Ex ante* measures are expected to have a motivational effect on employees as they form targets to be achieved. *Ex post* measures serve to compare with the *ex ante* in the process of evaluating the performance of both business unit managers and their subordinates. The "Chinese Walls" created to facilitate management evaluation have the effect of making employees focus exclusively on the performance of their unit, which often leads to dysfunctional behaviour (e.g. competition instead of co-operation between business units), which goes against corporate objectives.

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Hopwood, (1972) examined four styles of performance measures based on budgets and observed that there were high levels of job-related tension, which resulted in poor relations with superiors as well as unfavourable relations with peers. The study revealed that there was no clear evidence that the set targets were achieved, although there was strong likelihood that employees were involved in manipulative behaviour.

Traditional management accounting has been criticised for failing to deal with issues that concern business in today's global environment. This is attributable, according to Johnson and Kaplan, (1987), to management accounting taking a back seat for over 60 years, starting from the mid 1920s up to the mid 1980s, during which companies devoted resources to financial accounting. They state that by 1925, most of the present day management accounting practices had been developed and for the next sixty years, not much was done to develop management accounting due to:

(1) the agency problem which promoted the focus on, and hence the development of financial accounting to enable owners of businesses to monitor the effective stewardship of their investment by directors. Cost accounting developed during this period due to the need to satisfy the reporting requirements of financial statements as regards the cost of goods sold and inventories. Financial statements required that costs be allocated between cost of goods sold and inventories. The emphasis was on allocation of costs to products rather than an accurate measure of resources consumed.
(2) the cost of information was high and this made the cost of maintaining two systems, i.e. management accounting and financial accounting systems prohibitive. Owners of businesses decided to use financial accounting more than management accounting to make decisions affecting their internal operations.

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The period of lost relevance, according to Johnson and Kaplan, (1987), covered the early- to mid-eighties. During this period, significant innovation in the manufacturing sector was achieved. This was due to; customers demanding a wide range of products, shorter product cycles, changes in production technology, and advances in information technology. In response to these developments, some companies adopted advanced manufacturing technologies (AMTs) and just-in-time (JIT) manufacturing techniques, which changed the production processes dramatically. There was also the development of the service industry, whose products and processes are different from

the manufacturing organisations. Management accounting was inadequate to deal with both the service organisations and the changes that took place in the manufacturing and competitive environments. Cost behaviour patterns changed due to the use of AMTs. Direct labour costs shrunk and overhead costs increased significantly such that there was need to control them. Unfortunately direct labour remained as a basis for attaching overheads to products, (Drury *et al*, 1993), and managers continued to focus on reducing direct labour instead of controlling overheads. Hence management accounting became irrelevant.

In summary, Johnson and Kaplan's lost relevance hypothesis is based on the argument that initially management accounting was relevant to the needs of businesses. However, after World War II, management accounting practices failed to develop fast enough in response to the changing needs of modern business. However, Johnson and Kaplan, (1987) argue that the information processing circumstances have changed due to the development of information technology. Scapens *et al* (1996) support this view by arguing that with modern database technology, it is quite feasible to have a single system of data capture for both management accounting and external reporting. Thus companies can cheaply integrate and maintain the two information systems, financial and management accounting. However, the inability of traditional management accounting to deal with contemporary business issues led to calls for the development of advanced management accounting techniques. These techniques are explored in the following sections.

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### 4.2.2 Advanced management accounting techniques

The call for relevance in management accounting saw the invention of new and "advanced" techniques during the 1990s. During this period, we see the emergence of Activity-Based Costing (ABC), (Cooper and Kaplan, 1988), Strategic Management Accounting, (SMA) (Bromwich and Bhimani, 1989) and later the Balanced Score Card, (BSC) (Kaplan and Norton, 1992). There techniques will be described in greater detail in the following sections. Other techniques that have received more attention in U.S.A. and Europe include target costing (Kato, 1993) and Kaizen costing, (Monden and Hamada, 1991). Target costing, according to Kato, (1993), has been practiced in Japan since the early 1960s, although it only began to receive significant attention in USA and Europe during the later part of the 1980s. It focuses on reducing product

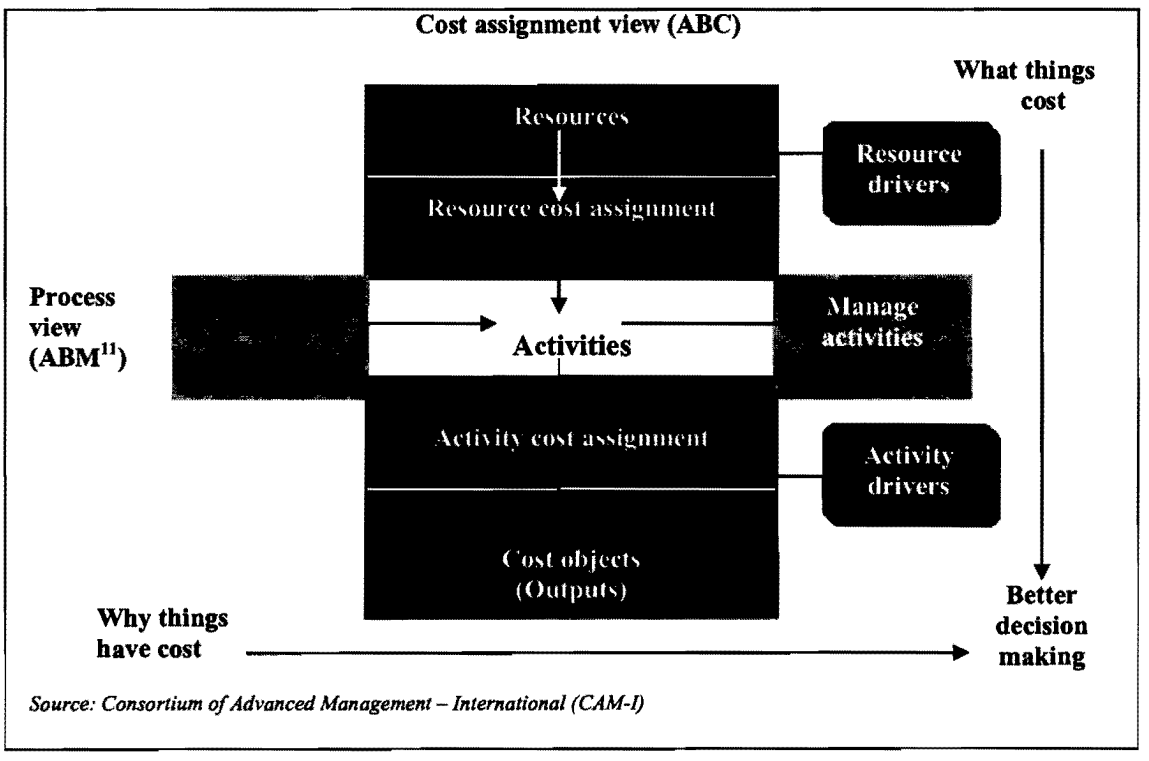
costs at the design stage in order to meet the price expectations of the market. Kaizen costing, which is mostly practised in Japanese companies, is concerned with making incremental improvements to production processes hence, it is the basis for continuous improvement.

#### 4.2.2.1 Activity-based costing (ABC)

Cooper and Kaplan, (1988) argue that virtually all activities of a company exist to support the production and delivery of goods and services. Therefore all of a company's costs except research and development should be considered product costs. As such all factory and corporate support costs should be split apart and traced to individual products or product families. The focus of ABC is mainly on indirect costs or overheads, since these are difficult to assign to products/services. ABC aims at producing a more accurate picture of the cost of products and services by establishing a causal relationship between costs and the broad range of cost objects, e.g. products, suppliers and customers, (Cooper and Slagmulder, 1998). Figure 4 below shows how ABC assigns costs to products and services.

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**Fig. 4 Activity-based costing: Cost assignment framework**




*Source: Consortium of Advanced Management – International (CAM-I)*

[11] ABM refers to activity-based management and will be discussed in the following section on page 62.

By first tracing overhead costs to activities that consume the indirect resources, and then charging products with activity costs based on the products' consumption of those activities, ABC is seen as a more accurate way of costing products and services than the traditional systems. This creates visibility of costs that arise from the provision of goods and services to customers. Knowing these costs with precision helps managing customer profitability. This is unlike the traditional costing approach that mainly uses labour hours and machine hours as surrogates for activities in overhead allocation, thereby failing to recognise the possible insignificance of labour cost in total product cost, as well as the complexity of product customisation, which accounts for most of the overheads.

Figure 4 above shows that the use of resources entails costs. These costs are first traced to the activities that are performed and hence that consume the resources. This is done using first-stage cost drivers, or as shown in the diagram, resource drivers. These are variables that link the consumption of resources to the activities performed. For example, the number of orders made in a given period drive procurement costs, thus the number of orders is the resource driver or first-stage cost driver.

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The second step is then to assign the costs of these activities to cost objects (products/services), based on the consumption of activities by the cost objects. This is achieved by using second-stage cost drivers or activity drivers. Using the same example of procurement costs, a product is assigned these costs based on the frequency of ordering of its raw materials, hence the higher the frequency of ordering, the more procurement costs assigned to a product.

Cooper and Kaplan (1988), however, admit that tracing costs, first from resources to activities and then from activities to specific products/services cannot be done with "surgical precision", (p. 97). Nevertheless, ABC is capable of generating value for companies by guiding managers to focus on expensive resources, resources whose consumption varies significantly by product and product type, and resources whose demand patterns are uncorrelated with traditional allocation measures such as direct labour, (Cooper and Kaplan, 1988; p. 97). They argue that ABC highlights which products are responsible for demanding expensive resources and enables managers to focus on such products. Thus managers are able to analyse such costs by product line,

customers, regions, channels; trace overheads more accurately to products causing them; analyse demands made on product improvement and process development resources by different products and product lines. ABC also challenges 'variable' and 'fixed' cost paradigm accepted by traditional management accounting, taking the approach that all costs are variable in the long-run. Consequently, expensive 'fixed' resources are examined more critically.

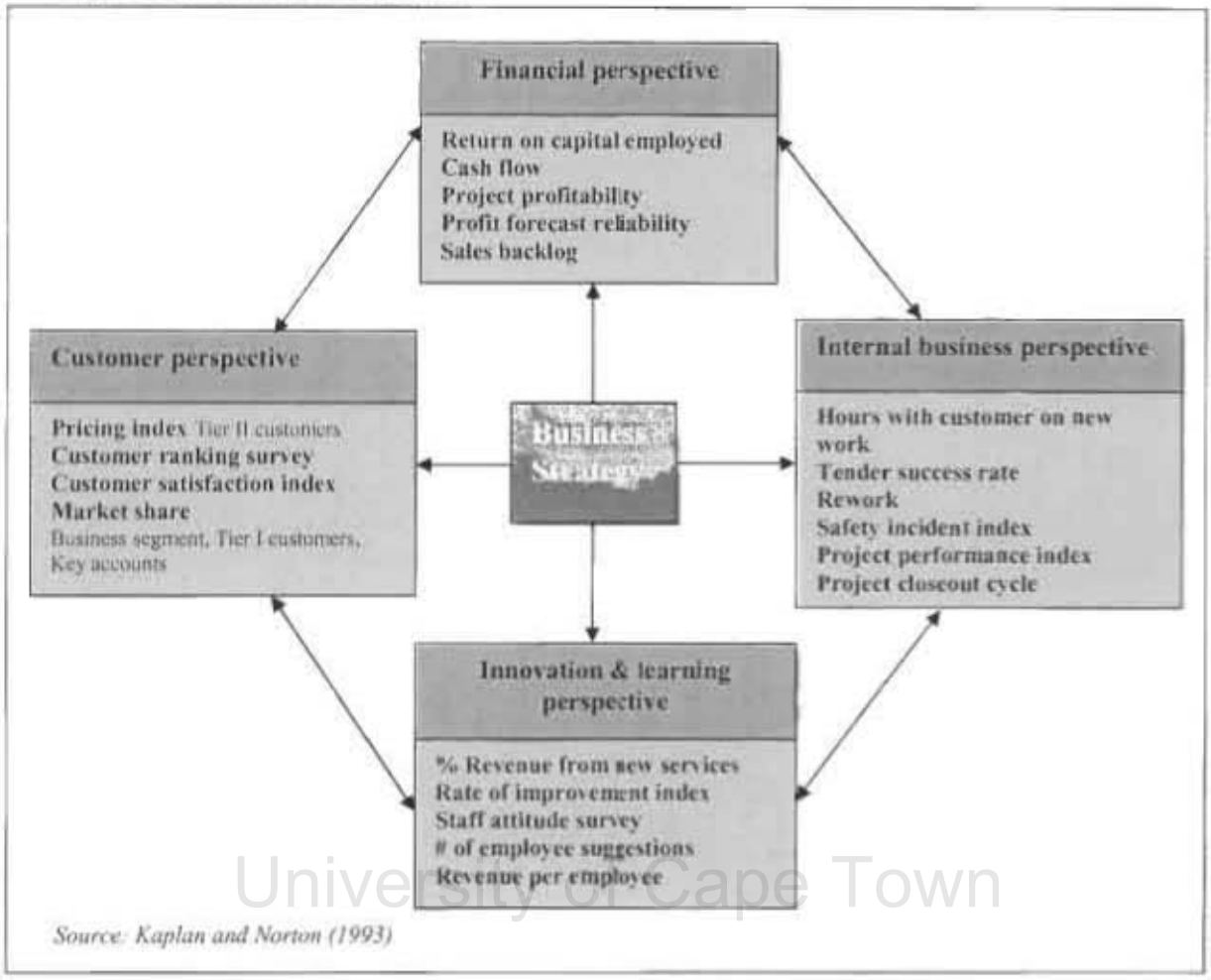
ABC has given rise to activity based management (ABM), which involves making proactive strategic and operating decisions based on activity information and assessing the value-adding content of work in business processes (Cokins, 1996; p. 42). ABM therefore consists of two primary viewpoints, namely the cost (what things have cost, as shown in figure 4) and the process views (why things have cost, as shown in figure 4), argue Trussel and Bitner, (1998). The cost view is met by the use of ABC to more accurately determine the full cost of products and services. The process view entails the development of financial and non-financial performance indicators for the output of each activity center, (Trussel and Bitner, 1998). Thus ABM integrates ABC with non-cost metrics such as cycle time, flexibility, quality, agility and customer service, (Cokins, 1996). ABM therefore emphasises the management of activities as the route to improving the value received by the customer and the profit achieved from the provision of the value, (Maccarrone, 1998, citing Raffish and Turney, 1991). Trussel and Bitner (1998) conclude that ABM is consistent with concepts of strategic management, i.e. it is the cost management side of strategic management.

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#### 4.2.2.2 The Balanced Scorecard

The Balanced Scorecard (BSC) is a comprehensive framework that translates a company's strategic objectives into a coherent set of performance measures, (Kaplan and Norton, 1993; p. 134). It allows managers to look at business from four important perspectives; the financial perspective, customer perspective, innovation and learning perspective, and internal business perspective, (Kaplan and Norton, 1992). The BSC is regarded as a management system that can motivate breakthrough improvements in such critical areas as product, process, customer, and market development, (Kaplan and Norton, 1993; p. 134). Figure 5 below shows how the BSC links strategy to performance measures.

**Fig. 5 The balanced scorecard**




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*Source: Kaplan and Norton (1993)*

Kaplan and Norton, (1992) explain how the BSC works by examining each perspective and illustrating how it fits into the overall strategy of a company. The customer perspective is concerned with the translation of the general mission statement into customers-specific measures. The internal business perspective focuses on business processes that have the greatest impact on customer satisfaction, for instance factors that affect quality, cycle time, employee skills and productivity. The innovation and learning perspective deals with the changes that are necessary for the company to remain relevant within the arena of global competition. Continuous improvement of all existing products/services and processes is therefore imperative, in order to have the capacity to introduce new products. The financial perspective deals with measures that indicate whether a company's strategy, implementation, and execution are contributing to bottom-line improvement, (Kaplan and Norton, 1992).

Kaplan and Norton, (1992) argue that the BSC has the advantages of minimising information overload while at the same time guarding against sub-optimisation. Information overload is minimised by limiting the number of measures used thereby forcing managers to focus on a few measures that are most critical. These measures are embedded in a company's strategic objectives and competitive demands, (Kaplan and Norton, 1993). Sub-optimisation is avoided by compelling managers to consider all the important operational measures together. This enables managers to see whether improvement in one area may have been achieved at the expense of another, (Kaplan and Norton, 1992; p. 73). Also the BSC serves the company's current *and* future success by indicating how managers can improve performance in the next period, (Kaplan and Norton, 1993; p. 134) [emphasis original].

Kaplan and Norton, (1993) argue that the BSC is meant to address the failures of short-term financial indicators like return on investment (ROI), sales growth and operating income by focusing on four main perspectives. It goes beyond the financial measures of performance to include non-financial measures such as market share, extent of innovation and customer satisfaction. These perspectives emphasise measures on internal processes, performance for customers, innovation and improvement activities. The BSC is therefore an effective tool for communicating corporate goals to frontline workers who are responsible for reaching them. It balances traditional financial measures, such as return on investment (ROI), with operational measures, namely internal business processes, customer satisfaction, organisational innovation and learning. It links initiatives, measures and compensation schemes to corporate strategy and communicates the importance of the scorecard throughout the company, from business unit-level down to individual employee.

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The **internal business processes perspective** includes measures such as timeliness and speed of processing transactions, scrap/waste percentages, ratio of approved to submitted orders, percentage of customer orders not on time, reworks, on-time delivery, accuracy of information, and planned versus actual output. These measures are meant to improve the internal processes of a company such that it becomes not only efficient (doing things right) but also effective (doing the right things), in the sense that it will be able to serve customers on time *and* provide the required

services/products. The processes of a company are also streamlined in such a way that waste through scrap and reworks are minimised, resulting in cost savings.

The **customer perspective** focuses on measures such as customer satisfaction (based on market perceived value), customer loyalty or retention (to ensure future business with the customers), drivers of overall customer satisfaction and value, including survey-based measures of, for instance, product/service quality and brand value. Another important measure in the customer perspective is what is known as 'Partnering Index-Rating'. This is a rating of customers' relationship with the company in such areas as involvement in planning, projects, investment in product and services. This is a measure of the extent to which the company collaborates with its customers, an important factor in the success of collaborative relationships such as supply chains.

The **innovation and learning perspective** includes measures such as patents generated by investment in research and development (could be expressed as so many patents per X million Rands), percentage of revenue generated by products that have been developed within a given period, teamwork (especially cross functional teamwork), employee turnover and absenteeism. Measures that focus on learning include output per employee, quality of output, skills mix based on performance appraisals, employee knowledge of the product/service that the company deals in and customer/client, organisational dynamics, and the industry in which the company operates. Analytical and interpersonal skills such as problem solving, selling, negotiating, management and financial competence are also emphasised.

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The **financial perspective** has measures of cost of a product/service, activity costs, ROI, return on capital employed (ROCE), shareholder loyalty (as indicated by their switching behaviour), return on equity (ROE), revenue generated from customer segments, profit margin, revenue per employee, and revenue to expense ratio. Measures of financial strength like debt to equity ratio, credit rating, current and quick ratios are also important in the financial perspective of the BSC. The measures that form part of this perspective are meant to show the value that has been generated by a company's activities for its stakeholders. The BSC therefore recognises the shortcomings of financial results alone as measures of a company's performance. It

emphasises the need to shift from treating financial figures as the foundation for performance measurement, to treating them as among a broader set of measures.

#### 4.2.2.3 Strategic management accounting (SMA)

Strategic management accounting (SMA), as suggested by Bromwich and Bhimani, (1989) aims to reduce costs while at the same time strengthening the strategic position of the company. This is achieved by reconfiguring management accounting towards an outward-looking approach which takes into account the needs of the customers and markets. Bromwich, (1990) defines strategic management accounting as:

> The provision and analysis of financial information on the firm's product markets and competitors' costs and cost structures and the monitoring of the enterprise's strategies and those of its competitors in these markets over a number of periods, (p.28).

The basic argument for strategic management accounting is that information should enable companies to respond to competition and to changes in customer demand, both of which are pressures that originate outside the enterprise. SMA is itself based on two economic perspectives; the first perspective is concerned with a product's attributes and the second one deals with competition. The first economic perspective says that a product is desired for its characteristics or attributes, hence it regards a product as a bundle of attributes/characteristics. Thus the value of a product comes from these attributes; hence they are central to strategic formulation. The accountant's role is seen as broader than the production of monthly profit statements. The accountant is seen as having a role in strategic decisions through costing these attributes and monitoring their performance over time, (Bromwich, 1990). The implication of regarding a product as a bundle of attributes is that the cost and other market characteristics of the product are intertwined and cannot be evaluated separately, hence the need to extend cost analysis beyond the company boundary.

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The second economic perspective known as the theory of contestable markets, explains the need for strategic management accounting in that sustaining company strategies requires that the company maintains its cost advantage over rivals. Cost advantage can be maintained if cost analysis is extended beyond a company's boundaries. This could be achieved by benchmarking a company's costs against its competitors' costs and finding ways of achieving a lower cost advantage.

The external focus enshrined in strategic management accounting enables the management accounting function to give emphasis to a company's value added relative to its competitors. Also, it permits management to monitor the performance of the company in the marketplace over a decision horizon long enough for strategic plans to come to fruition, (Bromwich, 1990; p. 28). The call for an external focus in the management accounting function is also echoed by Shank and Govindarajan, (1992) who base their argument on Porter's (1980) value chain concept, and recently by Shields, (1997) who argues that management accounting should have an external focus and play an important role in inter-organisational settings.

From the above discussions, it appears that traditional management accounting has weaknesses that may render it unsuitable for use in SCM. Advanced management accounting techniques however, appear to have potential to support supply chain value creation initiatives. The next section discusses the applicability of both traditional and advanced management accounting in SCM, with emphasis on cost management, in the process of supporting value creation.

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### 4.3 Sub-problem 13

*Which management accounting techniques and practices are associated with supply chain management and value creation?*

#### 4.3.1 Traditional management accounting's incompatibility with value creation

Traditional management accounting is seen as being unable or inadequate to support value creation along a product's supply chain. Its emphasis on costs and benefits, standard setting, performance reporting and resource planning and control creates only an economic visibility of the functioning of a modern organisation, (Barker and Majid, 1999). Such visibility is only technical and hence narrow in enhancing value creation. Traditional management accounting is therefore seen as an independent art that is detached from the context in which it operates, (Hopwood, 1983; Kaplan, 1984).

From this view, traditional management accounting serves no strategic purpose in supply chain management and hence has no value creation ability because it is inward

looking, internally motivated and self-reflecting (Bakar and Majid, 1999). This perspective is supported by the historical view of value, which was defined in terms of work done, i.e. the total cost of producing a product/service, (Mevellec and Lebas, 1999). The measure of value (cost of production) and the role of accounting (its ability to trace resource consumption) were both determined by accountants (who are seen as inward-looking and internally focused). Johnson and Kaplan, (1987) concluded that traditional management accounting evolved to meet the needs of internal processes. The purpose of traditional management accounting was to provide management (internal users of accounting information) with the technical details of cost of resources consumed in the process of producing a product in order to attach value to it. Since value is no longer determined by businesses but by customers, who are outsiders, its measure has changed, and traditional management accounting is seen as playing no role in its creation.

Traditional management accounting techniques have been criticised for being inadequate to deal with supply chain issues. Medina, (1999) argues that standard costing and absorption costing systems do not accommodate supply chain improvements such as leaner and more responsive organisations. He goes on to say that these traditional management accounting techniques do not promote supply chain objectives such as lower inventories, decreased lead time and improved due-date performance. This is because performance measures that are used by traditional management accounting promote individualism as seen in responsibility accounting. The exclusive focus on internal operations of a company does not fit well with the strategic thrust of a supply chain. By limiting management accounting practice to a company's boundaries, companies cannot take advantage of cost reduction synergies that exist across that supply chain, (Cooper and Slagmulder, 1998). Taking advantage of cost reduction opportunities across the companies in the supply chain requires the extension of a company's cost management programs beyond its immediate boundaries.

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Research carried out by Cullen *at al* (1999) established that reward systems that were based on performance measures such as residual income, inhibited collaborative work among managers of the same company. They observed that quasi-economic approaches had broken the practice of mutual and reciprocal inter-dependence; hence

managers were reluctant to open their books internally whilst they were willing to open their books to external organisations. Consequently, managers were not keen to look at processes across divisions.

The observation made by Cullen *et al* (1999) is very important because, for inter-company supply chain management to work there should be internal coherence within the companies themselves before they can integrate their operations with other companies along a product/service supply chain. Without collaboration between a company's departmental or divisional managers, coherence of internal operations cannot be achieved and therefore integration of inter-company processes is made difficult. Traditional management accounting practices and techniques have therefore been criticised for being irrelevant largely due to their focus on financial measures as well as the negative effects of responsibility accounting as discussed above. Cullen *et al* (1999) argue that supply chain developments like rising competitive intensity and world-class manufacturing demand the introduction of new management accounting techniques.

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Cooper and Slagmulder, (1998) argue that for the majority of the twentieth century, "management accounting practice has limited its scope to the boundaries of the firm. This limitation makes it difficult for the firm to take advantage of any cost reduction synergies that exist across the supply chain," (p. 18). Management accounting practice has therefore adopted a focus that is largely internal to the company – *its* purchases, *its* processes, *its* functions, *its* products, *its* customers, (Shank, 1989; emphasis original).

In conclusion, traditional management accounting techniques and practices are seen as being unable to promote teamwork, a prerequisite for cooperation and information sharing in inter-company SCM. The system of accountability enshrined in traditional management accounting promotes individualism and competition, aspects that go against the spirit of cooperation in SCM. Traditional management accounting practices, through responsibility accounting, focus on functional areas, thereby creating "Chinese Walls" that make focusing beyond the boundaries of one organisation difficult. SCM however, requires emphasis to be placed on managing processes that cut across boundaries of individual functional areas, as well as the

boundaries of a single organisation. If value creation in SCM is to be achieved, the management accounting systems should be able to provide accurate product costs so as to reveal the effectiveness of cost cutting measures instituted by supply chain partners. Employees should also be motivated to focus beyond the immediate boundaries of their 'work stations' and therefore support the strategic thrust of the entire supply chain. However, traditional management accounting uses techniques that do not produce accurate product costs, and utilises performance measures that promote a short-term perspective to the business.

### 4.3.2 Advanced management accounting and value creation

A contemporary view sees management accounting from a holistic and process-wide perspective (Bakar and Majid, 1999). Management accounting is seen as actively involved in shaping, moulding and constructing the setting in which it forms part (Hopwood, 1983). Bakar and Majid, (1999) argue that management accounting has a major role to play in value creation along the supply chain. All that is needed is to look at the role of management accounting beyond its own domain. In other words, there is need to adopt a perspective that looks at the role of management accounting from the outside, using values set by participants from other organisations. This view blends well with the current emphasis of the customer (an outsider) being a determiner of value.

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The research carried out so far has shown that management accounting has a role to play in supply chain management. Management accountants are seen as members of a multi-functional team that champions the whole process of establishing a supply chain. Cunningham and Homse (1986), cited in Holm *et al*, (1999) report that "...specialists in manufacturing, design, development, quality and finance .....were involved," (p. 470) in multi-functional teams. This is collaborated by the recent research carried out by Cullen *et al*, (1999) that investigated the role of management accounting in three companies that had serial, reciprocal and mutual dependence relationships with other firms, respectively. In all the three forms of inter-company supply chains, management accountants were an integral part of multifunctional teams that were charged with improving the competitiveness of the supply chains. Also they noticed that companies were sharing cost information, a practice termed 'open book accounting' or 'open book policy'. This practice involves each trading

involves each trading partner openly sharing its cost information with key supply chain participants. The practice engenders trust and creates an opportunity for supply chain participants to focus on joint cost reduction.

Other researchers have argued that value creation potential in management accounting lies in strategic cost management (Cooper and Slagmulder, 1998) as it blends three strategic management themes that are pertinent to supply chain management. These themes are value chain analysis, strategic positioning and cost driver analysis (Shank, 1989; Shank and Govindarajan, 1993).

### 4.3.3 Strategic cost management

Strategic cost management is defined as "cost analysis in a broader context, where the strategic elements become more conscious, explicit, and formal," (Shank and Govindarajan, 1993, p. 6). Strategic cost management involves the blending of the financial analysis elements of the three strategic management themes – value chain analysis, strategic positioning and cost driver analysis (Shank, 1989).

Shank (1989) defines a value chain as the "linked set of value-creating activities all the way from basic raw material sources for component suppliers through to the ultimate end-use product delivered into the final consumers' hands," (p. 50). Based on Porter's (1980) value chain concept, value chain analysis requires the management of costs to take a broad focus, external to the company. Using the value chain concept, cost management efforts involve organising the thinking of all supply chain partners about cost management, where the focus is external to each company in the value chain of a product/service. This entails seeing each company in the context of the overall chain of value-creating activities of which it is only a part (Shank, 1989). By taking a value chain perspective of the supply chain, companies are in a position to exploit linkages with suppliers and customers, thus facilitating cost management throughout the supply chain (Dekker, 2003). Customer linkages also enable a company to deal with life cycle costing – a relationship between what a customer pays for a product and the total cost the customer incurs over the life cycle of using the product. Shank (1989) argues that profitability can be increased by giving attention to post-purchase costs incurred by customers, where the lower the life cycle costs, the stronger the competitive advantage of a company.

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The strategic positioning concept is based on how a company decides to compete, i.e. whether through cost leadership or differentiation (Porter, 1985; Shank, 1989). Cost leadership and product differentiation involve different mindsets, hence they require different cost analysis perspectives (Shank, 1989). Cost leadership is a competitive strategy in which a company succeeds in producing products/services at the lowest cost, thus limiting the growth of competition in the industry (Porter, 1980; Blocher *et al*, 1999). Differentiation is a competitive strategy that involves a company developing and maintaining a unique value for the product as perceived by consumers (Porter, 1980; Blocher *et al*, 1999). In the context of supply chain management, the role of cost management thus depends on which strategic positioning is chosen by supply chain partners. The strategic positioning concept has potential to assist supply chain partners to focus on appropriate cost management techniques and practices, depending on how the entire supply chain is competing.

The cost driver concept is concerned with what causes costs, i.e. understanding the complex interplay of the set of cost drivers at work in any given situation, (Shank, 1989). Cost drivers can be classified into activity-based and volume-based (Blocher *et al*, 1999). (Shank, 1989) proposes an alternative classification of cost drivers into structural and executional. Activity-based cost drivers are identified using activity analysis – a detailed description of specific activities and the relationship between the activity and costs (Blocher *et al*, 1999). Volume-based cost drivers establish the relationship between cost and volume measures such as units produced, direct labour hours or quantity of materials used (Blocher *et al*, 1999).

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As far as structural cost drivers are concerned, Shank (1989) argues that there are at least five strategic choices that a company makes regarding its basic economic structure that drive cost. These choices involve scale, scope, experience, technology and complexity. Scale is concerned with the size of investment to make in research and development, manufacturing or marketing, while scope focuses on integration issues – vertical versus horizontal integration. The cumulative experience that the company has impacts on the costs incurred (the learning curve effect), and the technology used at each step of the value chain of a product/service has a bearing on cost as well. Complexity issues arise out of how many product or service lines a company has to offer to customers, which in turn drive cost up.

Executional cost drivers are determinants of a company's cost position based on the ability of a company to execute successfully, (Shank, 1989). The basic executional cost drivers include workforce involvement, total quality management (TQM), capacity utilisation, plant layout efficiency, product configuration, and exploiting linkages with suppliers and customers of the company in the supply chain. Workforce involvement entails the commitment of employees to continual improvement and TQM is concerned with beliefs and achievement regarding product quality (Shank, 1989). Plant layout focuses on the efficiency of the layout of a company's plant against current norms and this is coupled with the extent of capacity utilisation in the context of scale choices on plant construction. Product configuration is concerned with the design of products and their impact on cost.

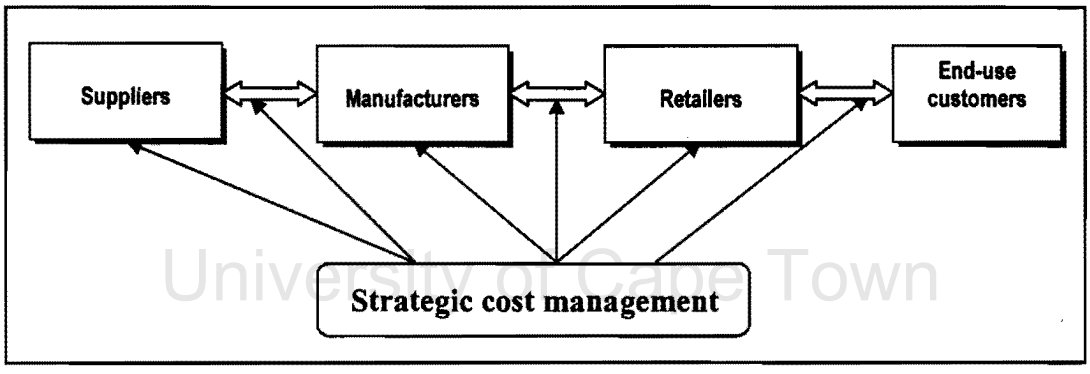
Strategic cost management is seen as achievable along the supply chain through the use of management accounting techniques such as target costing, (Lockamy III and Smith, 2000; Axelsson *et al*, 2002), activity-based costing/management (Shank, 1989; Trussel and Bitner, 1998; Lin *et al*, 2001; Axelsson *et al*, 2002; Dekker 2003), balanced scorecard (Kaplan and Norton, 1992; Axelsson *et al*, 2002), just-in-time (JIT) (Agrawal and Mehra, 1998; Blocher *et al*, 1999) and total quality management (TQM) (Agrawal and Mehra, 1998; Blocher *et al*, 1999). These management accounting techniques are seen as capable of supporting strategic cost management along the supply chain because they are process-oriented and inter-organisational in that they cross the traditional company boundaries.

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Strategic cost management is also supported by practices such as top management support (Agrawal and Mehra, 1998), open book accounting (Cullen *et al*, 1999; Seal *et al*, 1999; Hansen and Hansen (2001), inter-company multi-functional teams, collaborative planning, trust (Tomkins, 2001; Dekker, 2003), and sharing of costs and benefits (i.e. taking a value chain perspective, Shank, 1989; Shank and Govindarajan, 1993). Cullen *et al* (1999) argue that management accountants are beginning to get involved in strategic cost management for efficiency, effectiveness and in strategic issues through their involvement in inter-company multi-functional teams. These practices create an environment that allows supply chain partners to take a total supply chain perspective that facilitates strategic positioning and cost driver analysis.

Cooper and Slagmulder, (1998) argue that cost management beyond the boundaries of a company, using strategic cost management, is possible with the involvement of both suppliers and their customers. Cost reduction in such programs is achieved by the identification of ways to make the interface between companies along a product/service supply chain efficient, and the reduction of cost of production. The efficiency achieved by suppliers and their customers throughout the supply chain will result in the creation of value for the end-use customer, as well as the companies that constitute the supply chain. Figure 6 below shows the potential areas where strategic cost management can impact on value creation through cost reduction and operating efficiency.

**Fig. 6 Potential cost reduction areas along the supply chain**



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As shown in Figure 6 above, specific areas where strategic cost management could play an important role include making the buyer-supplier interface more efficient (operating efficiency), i.e. making improvements at the suppliers' side on one hand, and buyers' side on the other (inter-company improvements), as well as improvements within the companies themselves (intra-company improvements). Cost reduction across the entire supply chain, cost management during product design, and cost management during product/component manufacture, can be achieved.

### 4.3.4 Operating efficiency

Making improvements at the suppliers' side of the supply chain entails behavioural changes on the part of suppliers, which will then make the cost of buying from them cheaper. A company can show its supplier(s) the high cost of poor delivery, poor quality and big batch deliveries for instance, and then encourage them to start programs aimed at becoming leaner, and hence more responsive. Through close

cooperation between the company and its suppliers (which may involve sending people with expertise in lean thinking and quality improvement to a company's suppliers), the suppliers are in a position to significantly reduce costs by delivering on time and improving the quality of service.

Customers can also change their behaviour in such a way that the cost of providing services to them can be reduced. By implementing automatic order systems that feed directly into a company's sales order system, for instance, the customers can reduce the costs incurred by the supplier company to serve them. The supplier company itself needs to also change its behaviour in order to take advantage of cost reduction synergies that exist across the supply chain. Implementing total quality management and using electronic data inter-change are some of the ways by which the company can reduce costs and effectively interface with its suppliers and customers.

### 4.3.5 Cost reduction

The reduction of manufacturing costs across the supply chain through strategic cost management can be achieved by cost management during product design, and cost management during product/component manufacture. Inter-company cost management during product design entails close interactions between design teams from both the suppliers and their customers. The aim is to reduce costs to levels that would not have been possible if the companies were acting independently. At this stage, Cooper and Slagmulder, (1998) suggest that target costing can be used to reduce design costs. A customer partner takes into account the supplier partner's selling price, and then communicates to the supplier partner its difficulties to meet the market price. The supplier and customer companies can then initiate joint cost reduction programs by establishing joint design teams. Such cost reduction efforts may involve:

- Once-off cost reductions that require changing the quality or functionality of the product, which Cooper and Slagmulder, (1998) call the functionality-price-quality trade-offs;
- continuous cost reduction during design stage where the joint team suggests significant changes to the design and components of the product, a process called interactions concurrent engineering, (Cooper and Slagmulder, 1998).

The success of these cost reduction initiatives is dependent upon the existence of a cooperative relationship between supply chain partners.

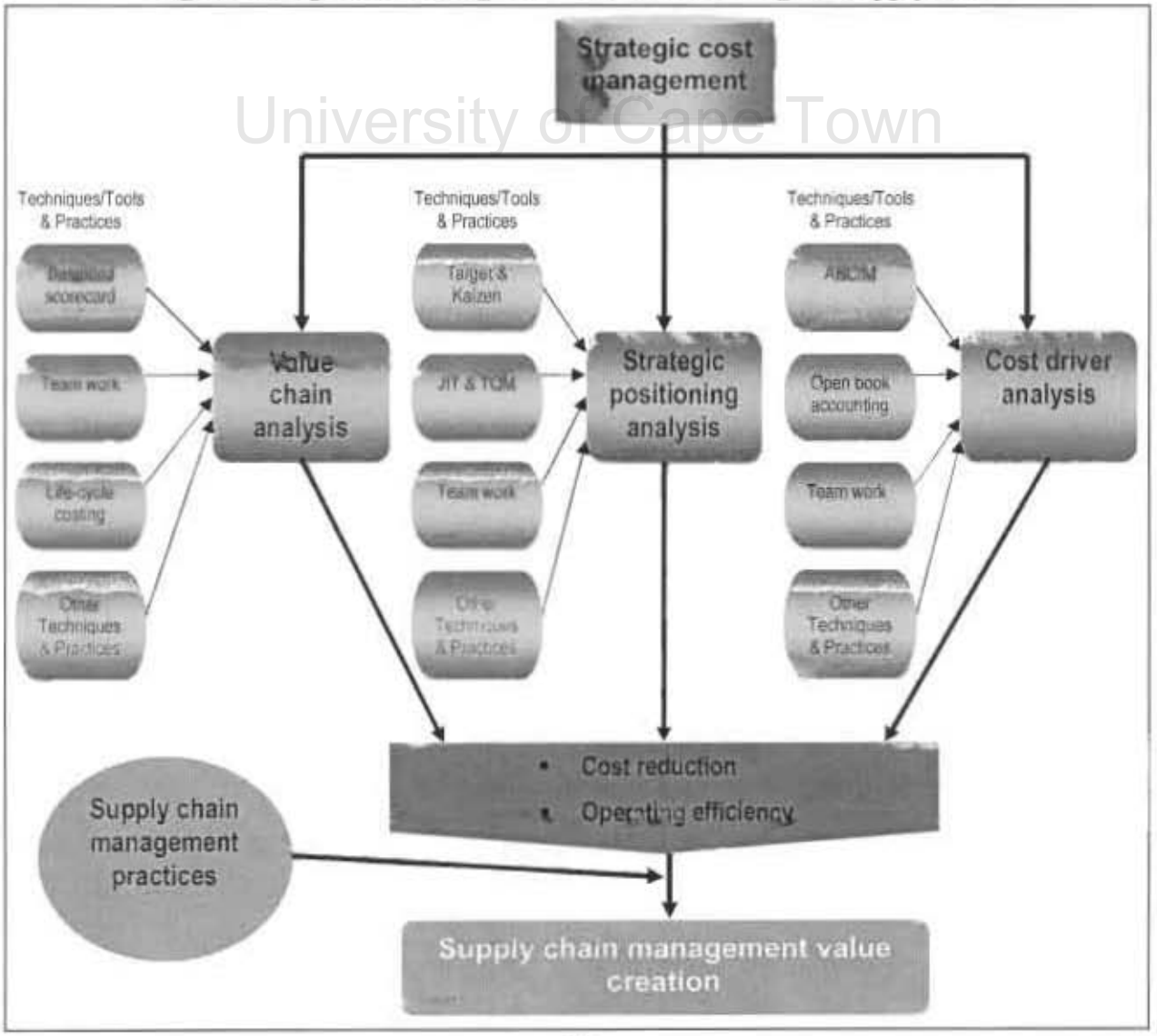
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Cost management during product/component manufacture using strategic cost management involves Kaizen costing, which helps in setting cost-reduction objectives across the supply chain, (Cooper and Slagmulder, 1998). The cost-reduction objectives are based on the competitive pressures that the customer company faces in the market. Such cost reduction objectives can either be:

- across-the-board for all outsourced items, for example 6% per annum, or,
- specific goals for each item, for instance 3% for part X and 5% for part Z.

Strategic cost management therefore has potential to benefit inter-company cost reduction efforts by helping companies along the product's supply chain to find a low-cost solution which they would not identify if they were working independently. Figure 7 on page 79 is a framework that summarises the value creation potential of strategic cost management in the context of supply chain management.

**Fig. 7 Strategic cost management framework along the supply chain**




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## 4.4 Conclusion

Strategic cost management appears to have potential to support value creation through cost reduction and operating efficiency, both which translate into improved bottom line. This is made possible by the application of advanced management accounting techniques such as activity-based costing, target costing, kaizen costing, just-in-time, balanced scorecard, total quality management and life-cycle costing. Practices such as open book accounting/policy, inter-company multi-functional teams, collaborative planning, and sharing of costs and benefits, are also seen as supporting strategic cost management. These techniques and practices have a focus that goes beyond the immediate boundaries of companies; hence they have potential to support strategic cost management.

However, despite the potential value creation benefits of strategic cost management, not much research has been carried out to investigate its application in supporting value creation along the supply chain. A lot of attention has been given to supply chain management on the one hand, and strategic cost management on the other. Thus these disciplines have been seemingly treated as mutually exclusive despite the fact that cost management has been reported as one of the measures used to assess the success of a supply chain (Seuring, 2002). Therefore the link between cost management and supply chain management appears to be a neglected area, both with regard to practice and academic research (Axelsson *et al,* 2000), resulting in a lack of a conceptual framework for cost management along supply chains, (Kajuter, 2002).

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In the context of the South African retail industry, no research has been done to understand the supply chain management practices, the value associated with the supply chain management practices, as well as how strategic cost management is being applied to support value creation. It is the purpose of this research therefore to investigate (1) the supply chain management practices (2) the nature of value associated with these practices and (3) the application of strategic cost management, along the South African retail industry supply chains by answering research questions in the following areas.

## 4.5 RESEARCH QUESTIONS

### 4.5.1 Supply chain management practices

1. What sources of competitive advantage are regarded as key within the South African retail industry supply chains?
2. What type of information is exchanged between companies in the supply chains?
3. Which reasons explain the formation of supply chains in the South African retail industry?
4. Which activities and processes are coordinated in the supply chains?
5. What are the barriers to, and enablers for, implementing supply chain management in the South African retail industry?
6. Which performance metrics are used in the supply chains?
7. Which management accounting practices are associated with the supply chains in the South African retail industry?

### 4.5.2 Value creation

8. What are the definitions of value associated with the supply chain management practices in the South African retail industry?
9. How is the value associated with these supply chain management practices created?

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### 4.5.3 Management accounting, with emphasis on strategic cost management

10. Which management accounting techniques and practices are being applied along the supply chains in the South African retail industry?
11. Where, along the supply chains are these techniques and practices applied?
12. Which techniques and practices are being applied to support strategic cost management in the process of value creation along these supply chains?

The answers to questions 1 to 7 are aimed at creating the context within which the application of strategic cost management is investigated. Questions 8 and 9 are concerned with how value is created and measured within the context of supply chain management practices established by answering the first seven questions. The answers to questions 10 to 12 focus on (i) the application of management accounting techniques and practices that support strategic cost management, and (ii) the way in which strategic cost management is being applied in the South African retail industry, in the process of value creation.

# CHAPTER FIVE

## RESEARCH METHODOLOGY

### 5.0 Introduction

This research used field-based and a multiple research method in gathering empirical evidence to address the research questions. The methods that were used are a survey and case studies. Multiple research methods are seen as having a synergetic value (Birnberg *et al*, 1990; Atkinson *et al*, 1997; Shields, 1997) in that the research benefits are more than the summation of the advantages of the methods used.

#### 5.1 Research setting

Empirical data was gathered from the South African Retail Industry. The South African Retail Industry is divided into three main sectors namely the Apparel/Textile, Furniture/Durable and Food/Fast-Moving Consumer Goods (FMCG) sectors. The Textile sector is divided into clothing, footwear and accessories. The goods traded in the FMCG are categorized into perishables, dry goods, toiletries and general merchandise. The Furniture/Durable sector includes all durable housewares. The industry is seen as an appropriate research setting mainly for the following reasons:

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1. The South African Retail Industry has experienced dampened consumer confidence due to:
    - The huge numbers of layoffs experienced in South Africa over the last five years that have subdued recovery in consumer confidence.
    - Changes in the spending patterns of those people still employed due to concerns over borrowing and spending.
2. The growth in discretionary spending such as gambling in casinos, lottery, and cellphones.
3. Fuel price increases have also eroded the buying power of the debt-ridden lower-earning consumers, as evidenced by an increase in transport spend from an average of 10% to 22% in eighteen months in 2001.

4. The AIDS epidemic in South Africa has also further eroded the purchasing power of most consumers.

Inevitably a change in the spending patterns of consumers has resulted in less money being spent in the retail sector, especially the clothing sector. The retail sector is therefore struggling with consumer spend dwindling on the one hand, and high cost structures on the other. Other issues worsening the plight of the sector are lower finance earnings, price-driven margin-slashing sales campaigns, and poor operational skills, e.g. stock control. Margin-slashing sales campaigns have not yielded the desired result due to low sales volumes.

The above problems have been largely felt in the Textile and FMCG sectors and particularly in the clothing sector where costs have continued to rise due to the fall of the Rand (this sector imports fabric and garments mostly from Europe and Asia), against the US dollar and the Euro, yet consumers are looking for even greater value for their money. The main coping mechanism of retailers has been to strip out the cost base through cutting the margins of manufacturers to the extent that further cost cuts are becoming extremely difficult to achieve (a significant number of manufacturers have gone under as a result), and even when achieved are so small that they yield very little. Consequently, the key to the long-term survival of the sector appears to be the proper and careful management of the merchandise function. This research focused on the two sectors, the FMCG and the Textile sectors, for reasons given below.

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### 5.1.1 The clothing sector

This sector has experienced supply base problems due to:

1. The opening up of the South African economy, resulting in trade between South Africa and its merchandise suppliers in the East Asia significantly increasing, thus putting the local textile manufacturing sector under pressure.
2. The Eastern countries are manufacturing merchandise cheaply, despite a weak Rand that should make South African exports cheaper.
3. The significant decline in the South African manufacturing base as a result of competition from the Eastern countries.

Consequently the retailers in South Africa are facing a problem of securing goods due to a declining local supply base, and thus are now keen to capture their own supply source.

The desire to secure local supply base is even more important in the light of reliability problems associated with imports. The imported merchandise has to go through long distances before reaching South Africa, resulting in delays and quality problems that cannot be quickly solved. The retailers are interested in having local manufacturers that are reliable and who can give them a quick turnaround and good quality. The retailers, who are very dominant and compete among themselves in the clothing sector, are keen to have dedicated manufacturers instead of buying from manufacturers who are also supplying other retailers due to difficulties in differentiation of designs, i.e. an manufacturer supplying several retailers may not be able to produce a garment in fashion in significantly different designs – the "writing problem" – hence the retailers may end up getting more or less the same garment design and colour. Also retailers' ideas may end up being used by other retailers due to sourcing from the same manufacturers. Consequently, retailers are keen to forge close ties with manufacturers in a way that give a retailer exclusive access to the skills of the manufacturers. In this close relationship, a manufacturer interprets fashion in a certain way, just for the retailer and does not use the ideas for other retailers. The retailer gets the best that the manufacturer can offer, which enables the retailer to attract the end-use customer with the best garments.

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### 5.1.2 The food/FMCG sector

The FMCG sector on the other hand has been growing due to several factors that include the ability of the retailers to transfer price increases to end-use customers, and the decline in the popularity of cash and carry stores. The market growth in 2001 was about 9%[12] per year. However, the current price increases in food items, transport and fuel, and interest rates hikes experienced in 2002, have eroded consumer-spending power significantly. Thus this sector also faces huge pressures to provide goods that are affordable to the majority of South Africans. The retailers in this sector are also keen to establish

[12] Source: Bureau for Economic Research, South Africa

relationships with their manufacturers that enable them to meet the needs of end-use customers at affordable prices.

The South African retail industry therefore presented an appropriate research setting where:

1. Due to the intense competition (local and overseas) and the difficult trading conditions arising from the significant decline in consumer spending power and changes in spending habits, retailers are keen to establish relationships with manufacturers that create value for the end-use customer as a way of survival.
2. There is need to show the real benefits (value) of the relationships to both manufacturers and retailers. This is particularly important in an environment where relationships have been adversarial for a long time, i.e. based on a win-lose scenario. Thus the benefits of collaboration are expected to be tangible in order to facilitate and strengthen collaborative relationships.

The following sections deal with the data collection approaches used – the survey and case study methods.

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## 5.2 SURVEY METHOD

A survey method was used to gather information to answer research questions 1 to 7, i.e. to understand the supply chain relationships that exist between retailers and manufacturers in the South African retail industry, as well as some of the management accounting practices are associated with these supply chains. The focus at this stage was on a broader understanding of the relationships between retailers and their suppliers. A survey method was therefore seen as an appropriate method to achieve this goal because it enabled the researcher to look with 'intense accuracy' at the phenomena (the nature of supply chain management practices) in the current circumstances (current trading relationships between retailers and their suppliers) and then describe precisely what had been observed, (Leedy, 1993; p. 185). The survey method allowed the collection of data to answer the specific research questions. Collectively the answers to these research questions assisted in understanding the nature of the relationships between retailers and

manufacturers and thus enabled the classification of these relationships into levels one to four, according to Poirier (1998).

### 5.2.1 Type of survey method

A descriptive survey was used and involved the observation[13], with close scrutiny, of a population as defined by the research parameters, and then the making of a careful record of what had been observed, (Leedy, 1993). The recording was done in such a way that when the aggregate record was made, the researcher was able to turn to the record to study the observations that had been described, (Leedy, 1993). The descriptive survey was appropriate for acquiring empirical evidence because at this stage the research focused on ***observing*** the nature of relationships between retailers and their suppliers to determine into which category the relationships belong, i.e. levels one to or four of supply chain relationships.

### 5.2.2 Purpose of survey

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The purpose of the study was to establish the current supply chain management practices in the South African retail industry. The study focused on establishing the presents of collaborative practices and the extent to which such practices are applied in the retail sector from the perspective of retailers. It was felt that since retailers have more power over their key manufacturers derived from their size, any supply chain management practices currently applied in the retail sector would have been greatly influenced by them. Some retailers in the South African retail industry are almost in an 'oligopolistic' position in that the industry (particularly the food sector) is dominated by a few retailers. In the food sector, four retailers constitute about 85% of the market, while in the textile sector, four retailers have a market share of about 70% in the middle- to upper-earning sector.

Also, at this stage of the research, retailers were used as a 'point of entry' into the supply chain dynamics within the South African retail industry. Insights gained from the survey

[13] Observation refers to the preserving or keeping completely, in the form of written record, what has been seen by the researcher. Seeing in this sense refers to the ability of the researcher to become aware of data through some means of detecting them, e.g. data acquired through a questionnaire. See Leedy, 1993.

were used as 'navigational information' during the case studies stage. Thus by focusing on retailers it was felt that more insights would be gained into the current supply chain management practices in the retail industry. The 'bias' in the approach at this stage of the research was counter-balanced by in-depth study of the manufacturers in the case studies stage of the research as discussed later.

### 5.2.3 Data collection

A structured questionnaire was used to gather information about the specific relationships between retailers and manufacturers. The questionnaire was divided into different sections, with each section representing a specific theme that assisted in answering research questions 1 to 8.

### 5.2.4 Questionnaire

The survey involved the administration of a questionnaire that was divided into different sections (sections A to V) according to specific themes. The themes related to a number of supply chain management issues that reflected an array of factors affecting workflow and information flow among levels of the supply chain, as well as gaining an appreciation of measures of supply chain performance (Spekman *et al*, 1998), and management accounting practices. Although the questionnaire was divided into different sections, collectively they reflect a continuum of activities and processes that give an insight into the supply chain management practices in the South African retail industry. Thus issues dealt with in these sections help in the examination of aspects of supply chain management practices that would indicate the stage(s) of development of the relationships between retailers and their key manufacturers i.e. in which of the levels one to four they are, according to Poirier, (1998). Sections B to J of the questionnaire contain items borrowed from Spekman *et al*, (1998) and Campbell, (1997), and were used to collect data to answer research sub-questions 2 to 4. Section K contains items borrowed from Lambert *et al*, (1996) and these items were used to collect data to answer research sub-question 6. However, unlike Spekman *et al* (1998) who examined supply chain management practices from both the retailers' and their manufacturers' perspectives, this study specifically examined the same issues from the point of view of retailers for

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reasons discussed earlier. Sections L and M contain items derived from literature on supply chain management practices (to answer research sub-question 6) as well as management accounting practices (to answer research sub-question 7). In most of the sections, respondents were asked to rank given statements (supply chain practices) on a scale of 1 (least important) and 7 (most important) by simply ticking a corresponding box.

### 5.2.5 Administration of the questionnaire

Questionnaires together with pre-stamped, self-addressed reply envelopes were sent to eight large retailers, four in the FMCG and four in the textile sector. The four retailers in the FMCG sector constitute about 85% of the South African food market and the four retailers' market share in the middle-to-upper textile sector market is about 70%. The middle-to-upper textile market was chosen for the study because of its formalised way of doing business. The lower textile market is composed of mainly an informal sector where supply chain management practices are likely to be non-existent. The administration of the questionnaire involved phoning the respondents first before sending the document. A total of six retailers replied, four in the FMCG sector and two in the textile sector. The other two retailers in the textile sector cited confidentiality as the reason for not participating in the survey. However, this is despite having agreed to answer the questionnaire when spoken to over the phone.

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The respondents in each retailer were from different functions – operations, procurement and finance. The positions occupied by the respondents were Buyers, Supply Chain Executive, Operations Manager, and Management Accountants. Questions that each of the respondents were asked focused on their perception of and/or their experience of the relationship they have with key manufacturers. For practical reasons, each retailer was asked to choose **one major supplier** of merchandise to be interviewed.

### 5.2.6 Problems and solutions of mailed questionnaires

Mailed questionnaires suffer from poor response rates. Practitioners not always motivated to spend time answering questions that do not help in their evaluation at the end of the

year. Related to the above problem is the issue of the quality of the responses, which can be very low due to respondents simply ticking answers to get over with the process of completing the questionnaires. Follow ups were done through telephone and mail, in cases of non-response in order to improve the response rate. Sending the questionnaires on time so as to give the respondents ample time to complete the questionnaires also enhanced the quality of the responses.

### 5.2.7 Data analysis

Data collected was analysed using descriptive statistics, - means, medians, e.t.c. The analysis of answers to the questions contained in the questionnaire provided empirical evidence that helped in determining whether a retailer had a supply chain relationship with key merchandise manufacturers that fitted into levels one of the four levels of supply chains.

### 5.2.8 Problems/criticisms of the survey method

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The survey method has been criticised for several reasons. Roberts, (1999) summarised the shortcomings of the survey method as:

- Survey research just collects masses of data and provides nothing of theoretical value.
- Survey research is too restricted because of the limitations of highly structured questionnaires.
- Data collected from surveys contains so much measurement error that they are quite unreliable and validity is extremely low.
- Surveys cannot adequately establish causal connections between variables.

### 5.2.9 Mitigatory approaches

In order to address the above potential weaknesses of the survey method used in this stage of the research, certain steps were taken to ensure that the data collected at this stage was useful to the research. A clear definition of constructs (as per the questionnaire) and the use of questions that gave a clear picture of what data was to be collected and its importance to the study (as per the questionnaire), addressed the first and the second criticisms. The third criticism was addressed by questions that were developed in such a

way that maximum reliability and validity could be achieved from the data collected. This involved the use of multi-item scales instead of single-item scales to deal with constructs that were better covered if more than one question was asked, (Roberts, 1999). Also a number of related questions in the questionnaire were meant to enhance the validity of data collected because a single question could be misunderstood or misinterpreted. Lastly, a careful analysis of the collected data helped in establishing causal relations between the empirical evidence gathered.

## 5.3 Validity problems

### 5.3.1 Internal validity of the survey method

Internal validity refers to the ability of the measures used to represent the underlying theoretical constructs, (Abernethy *et al*, 1999). High internal validity is achieved when it is possible to assert that the variation in the dependent variable is due to, or a result of, variation in the independent variable(s).

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It is difficult to attain internal validity with the survey method because variables are measured simultaneously. Therefore, when variables co-vary, that may not necessarily mean that there is causality. Unmeasured variables may explain the observed relations, which means that the researcher has to rely heavily on the theoretical arguments to convince the reader that it is the hypothesised variable and not other variable(s) that is (are) driving the results, (Abernethy *et al*, 1999). At this stage, this research was concerned with having a broad understanding of the nature of trading relationships between retailers and their key merchandise suppliers. Therefore internal validity problems were not a serious drawback.

### 5.3.2 External validity of the survey method

External validity refers to the ability to generalise the results of one study to, and across populations of other people, places, settings and times, (Ghauri *et al*, 1995; Abernethy *et al*, 1999). It was desirable to generalise from specific data set to the target population, especially in the context of this research, where the findings may have some relevance to organisational practice. The survey method used in this stage of the research achieved

high external validity because the retailers included in the sample constitute 85% and 70% of the business done in the FMCG and Textile sectors of the South African retail industry respectively.

After the data collected using the survey method had been carefully analysed to establish categories into which supply chain relationships belong, an in-depth analysis was then required to investigate the role of strategic cost management in supporting inter-company supply chain value creation. Thus the next stage of the research is executed by case studies.

## 5.4 CASE STUDIES

### 5.4.1 Definitions of a case study

Hamel *et al*, (1993) trace the origins of case study to case history, which has been used widely in clinical fields like psychology and medicine. They also look at a case study from a sociological point of view, and citing Zonabend, (1992; p.52) they regard a case study as involving *giving special attention to totalising in the observation, reconstruction and analysis of the cases under study*. A case study is therefore a method used in the in-depth study of the case(s) under consideration. It is an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomena and context are not clearly evident, (Yin, 1994; p. 13).

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### 5.4.2 Suitability of case studies

Case studies were utilised in the second stage of the research because of the desire to have an in-depth understanding of the role that strategic cost management plays in supporting value creation along inter-company supply chain relationships that had been identified in the survey stage. Case studies helped in dealing with research questions 8 to 12, i.e. the understanding of value and how it is created along the South African retail industry supply chains. Also, case studies facilitated an in-depth understanding of how strategic cost management is applied to support value creation in the context of these supply chains. Case studies were seen as appropriate at this stage of the research because

the researcher had little control over events and in addition, the research focused on a contemporary phenomenon within some real-life context, (Yin, 1994). The inter-company supply chain relationships are "...novel or innovative ....settings in which [management accounting practices] exist," (Shields, 1997; p. 11). The strategic cost management techniques and practices were thus investigated in the context of supply chain relationships identified at the survey stage, i.e. in the real-life context, according to Yin, (1994).

### 5.4.3 Sample size

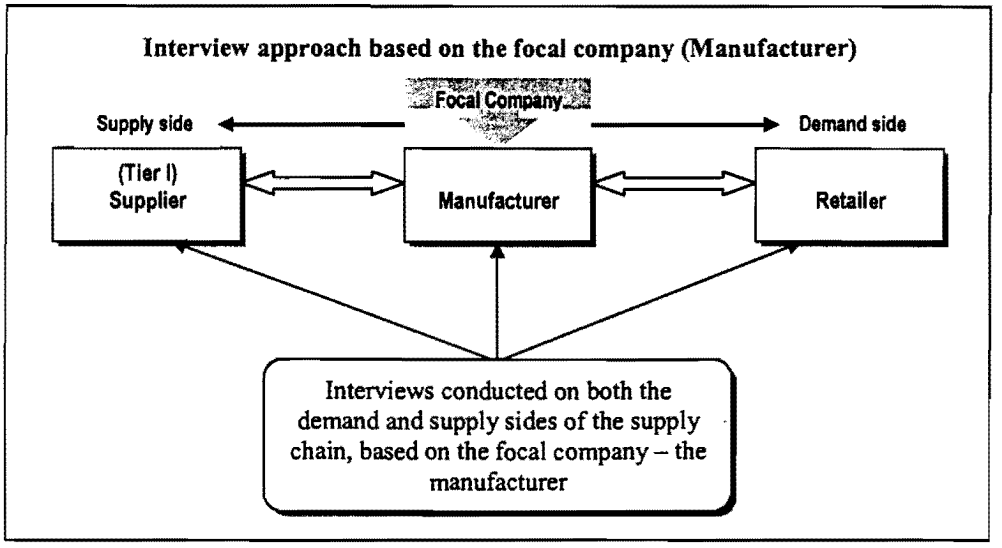
For practical reasons (time limit) and the difficulties in gaining access, only **three** retailers were selected for an in-depth analysis from the total respondents. An in-depth study of how these companies apply strategic cost management in their supply chains in the process of value creation was then carried out. A 'snowball' approach (Dewhurst *et al*, 2003) was used by asking each retailer to choose one key manufacturer for an in-depth analysis. The key manufacturer chosen was in turn asked to choose one of its key suppliers (Tier I Supplier) that forms part of the supply chain with the retailer, for an in-depth analysis. Thus a total of **nine** companies that constitute **three** supply chains were given an in-depth study. The empirical data that formed the basis of analysis was gathered through interviews, relevant company documents and personal observations.

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### 5.4.4 Data collection

Data collection was done mainly through interviews, but company documents were also examined (wherever they were provided) to substantiate and supplement what the interviewees had said. In order to investigate cost management from both the demand and supply side of the supply chain, interviews were based on a focal company – manufacturer – and then extended to the manufacturer's supplier and customer (retailer) as shown in figure 8 below.

**Fig. 8 Scope of interviews**




### 5.4.5 Interviews

#### (a) Focal company (Manufacturer)

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Interviews conducted at the focal company involved spending about one and a half hours with some of the following officials of the merchandise manufacturer company: Financial Manager, Production Manager, Logistics/Distribution Manager, Purchasing Manager and Sales/Marketing Manager[14]. Interviews were set well in advance in order to allow enough time for the proposed respondents to arrange meeting times depending on their schedules. An agenda of broad questions (in form of an interview guide) that were asked during the interviews was sent in advance to all the proposed interviewees to give them time to prepare for the interviews. Permission to tape the interviews was also sought well before the interviews and once the proposed respondents had set the dates when they were available, immediate confirmation was given to them as assurance that the researcher was in agreement with them.

[14] The number of people interviewed dependent on the functions that each of the manufacturers had. Thus not all functions were available in all the manufacturers studied.

After transcribing the taped interviews, a typescript was sent to each interviewee to get a written confirmation of the accuracy of the copy sent and/or to give them an opportunity to correct the facts contained in the copy.

The interviews were semi-structured in such a way that specific questions were asked and a respondent was given enough room to answer. This approach did not constrain the interviewee and also allowed for follow-up questions as the interview progressed. However, this approach may be subject to intrusive effects of the interviewer bias, both during the interview and in the analysis of transcripts, Lillis, (1999; p. 84). In order to overcome the weaknesses of semi-structured interviews, Lillis, (1999) suggests two approaches, (1) the design and use of an interview guide and (2) a qualitative analytical protocol that leaves an audit trail. Both approaches were used in this research.

### 5.4.6 An interview guide

An interview guide is a document that had all the main questions and probes that were asked during the interview. The questioning approach and some of the questions used in the interview guide were influenced by Ellram (2002). However, while Ellram (2002) focused on strategic cost management along the supply chain from a purchasing and supply management perspective, this research took a broader perspective to include finance, sales/marketing and production functions. Also, Ellram (2002) almost exclusively focused on the manufacturer, and this research extended cost management studies (both intra- and inter-company techniques and practices) to suppliers of manufacturers (i.e. Tier 1 suppliers, hereinafter referred to as suppliers) and retailers.

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During the interviews, probes (follow-up questions) were used, subject to the answer(s) that an interviewee had given to a particular question. Each function in the focal company (e.g. Finance, Sales, Purchasing, Logistics and Production) had a tailor-made interview guide that facilitated the collection of information on cost management techniques and practices pertinent to that function. The interview guide was semi-structured in the sense that it focused on specific issues but at the same time allowed respondents to discuss related issues outside the interview structure. The advantage of this flexibility was that it

permitted broader responses, thereby increased the chances of the researcher gathering data that were relevant to the hypothesised constructs, (Abernethy *et* al, 1999). The interview guide was divided into sections as follows: the first section covered general company information and the length of time the interviewee had been with the company and the period of service in the particular function. The following sections contained cost management specific to the function, explored from the supplier-facing and customer-facing perspectives.

Each section contained semi-structured questions and potential probes that helped to further explore the questions asked. The questions that were asked focused on cost management techniques and practices used by the manufacturer in enhancing or facilitating value creation, (1) within its operations, (2) with supplier and (3) with the retailer. The purpose of the interview guide was to ensure that adequate coverage of important themes was done and at the same time avoiding researcher bias. The questions and probes in each section were non-directive in order to minimize unplanned, non-neutral questions and probes while interviewing, (Lillis, 1999). However, the interview guide was used in a reasonably flexible way so as to elicit *full* but *undirected* responses from interviewees on the strategic cost management issues under study.

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**(b) Supply side (Supplier)**

Questions contained in the interview guide for suppliers focused on cost management issues specific to its internal operations, its relationship with (1) the focal company (manufacturer), (2) key suppliers (general issues), (3) the retailer.

**(c) Demand side (Retailer)**

Questions contained in the interview guide for the retailer focused on cost management issues specific to the its relationship with the focal company (manufacturer), its internal operations, as well as its relationship with the supplier.

### 5.4.7 Data analysis

The principal unit of analysis (Nieto and Perez, 2000; Rowley, 2002) in this research was the entire supply chain, and not one participant along the supply chain. Each company along the supply chains studied was the intermediate unit of analysis, as it was seen as the "natural filed of a combination of factors [techniques/tools and practices in each function or multidisciplinary area] which are specific, as well as related to the principal unit (Nieto and Perez, 2000; p. 726). At the focal company – the manufacturer – the intermediate unit was further broken down into sub-sets (i.e. functions such as purchasing, logistics, production, finance, sales and marketing). The case study results for all the manufacturing companies along the three supply chains studied were thus presented showing the cost management techniques and practices applied by the different sub-sets of the intermediate unit of analysis. The collective results from these sub-sets produce an overall picture, (Rowley, 2002) of the cost management techniques and practices applied by the particular companies, along the supply chain studied.

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The analysis of the case studies followed a pattern of behaviour strategy as suggested by Nieto and Perez, (2000) in that it involved (1) the comparison of the cost management techniques and practices applied along the three supply chains studied (against each other) in line with the research questions and (2) the comparison of these cost management approaches against the theoretical framework developed in the literature section of the thesis. In the second part of the analysis, the theoretical framework developed at the end of literature review was used as a template with which to compare the empirical results of the case studies (Rowley, 2002). Thus the analysis starts by answering the research questions as follows.

### 5.4.8 Qualitative analytical protocol

A qualitative analytical protocol was used to analyze and interpret the results of interviews. The analysis of any qualitative data entails the process of **reduction** or **summarisation, classification** and **interpretation**, (Lillis, 1999; *emphasis added*). Consequently qualitative data analysis may be prone to significant bias because its classification and interpretation depend on the researcher, which in turn may negatively

affect the trust placed on the results. Lillis, (1999) summarizes the potential problems of qualitative data analysis and the results therefrom as follows:

> Readers are left questioning the extent to which propositions raised by the researcher are supported by the data, whether potential alternative propositions have been "overlooked", whether all cases were systematically evaluated before propositions were raised, whether the researcher saw only what they set out to see in the data, and whether the process is reproducible, (p. 87).

In order to enhance trust in the results of this research, a systematic analytical protocol, suggested by Lillis, (1999) and propounded by Miles and Huberman, (1994) was used.

**Procedure for a systematic analytical protocol**

- Data collected during the interview was recorded in databases that were coded according to which question within the interview guide they belonged (appendices **A** to **G**). This was done to ensure that all data collected was included in the analysis instead of using selective "quotes" to support the relations of interest, (Lillis, 1999; Abernethy *et al*, 1999). The coding of data was done to promote completeness of data analysis, minimise potential bias in analysing the data, enable the researcher to look for supporting evidence of relations identified, and provide an audit trail which enables the reader to trace the source of the conclusions reached back to the original data.
- The next stage was to select sections of the transcript relating to constructs of interest to look for confirming evidence, i.e. with the aim of identifying patterns among these constructs. This involved creating tables, which form part of the body of the thesis, summarizing (1) intra-company cost management techniques and practices, (2) inter-company cost management techniques and practices and (3) value created. The analysis then yielded information from which conclusions were drawn about the value creation potential of strategic cost management in the context of supply chain management. In addition, sections of the database that assisted in explaining the techniques and practices and how they are applied, were also extracted and used in the presentation of the case study results.

### 5.4.9 Potential bias in using qualitative analytical protocol

The qualitative analytical protocol did not totally exclude bias because the researcher had to decide how to interpret the meaning associated with each selected sentence of the

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transcript.Abernethy *et al*, (1999) suggest that **consistent** and valid coding and interpretation of transcript data ensure reliability of the results generated using the qualitative analytical protocol. Thus the coding was done in a consistent manner across all companies and employees thereof interviewed. The results of the interviews are also included as part of the appendices to allow the reader to verify the source of conclusions reached in the thesis.

## 5.5 Validity problems

### 5.5.1 Internal validity

This research was motivated by the need to enrich and extend our understanding of how management accounting, particularly strategic cost management, can play a role in supporting inter-company supply chain value creation. The focus of the research was therefore exploratory and concerned with theory building. The relevance of using the internal validity criterion to evaluate the research results and conclusions was therefore questionable, (Abernethy *et al*, 1999; p. 20). Instead of using the internal validity causal relationship criterion, Abernethy *et al*, (1999) advocate the use of Golden-Biddle and Lock's (1993) **"notion of plausibility"** to assess whether the data collected support the conclusions reached. In the context of this research, what was required of the researcher was to provide adequate empirical evidence to show that the data collected make sense and that they support the conclusions reached. Evidence that enabled the elimination of competing explanations was also required.

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Therefore the researcher was required to continue collecting empirical evidence from multiple sources, multiple sites and through different means until the data converged to a preferred, most plausible causal explanation, (Abernethy *et al*, 1999; p. 20). Empirical evidence was collected from different companies through interviews, questionnaires and from secondary sources like company records. This allowed the collection of data from *multiple sources, multiple sites* and through *different means*.

### 5.5.2 External validity

The focus of the research at this stage – a case study - was on theoretical generalization instead of statistical generalization, (Scapens, 1990). The aim was to illustrate and support more general theoretical arguments by locating the specifics of a few cases within a large expanse of a more general theory, (Abernethy *et al*, 1999). Therefore, although external validity would be a problem where the research aims to generalize the results of one study to the total population, this reach did not seek to do that.

The research results are, for the purposes of clarity, divided into two different chapters. The results of the survey are presented in chapter 6 and chapter 7 contains the case studies results.

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# CHAPTER SIX

## SURVEY RESULTS

### 6.0 Introduction

This Chapter presents the results of empirical studies (survey) that form part of the basis of answering the research questions. First the background of the research setting is given, followed by details of the survey results. For the purpose of presenting the empirical findings, the details of the results are arranged in sections according to the specific research questions (sub-problems 1 to 7) that were addressed in the survey. The sub-problems addressed in this chapter are as follows.

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1. What sources of competitive advantage are regarded as key within the South African retail industry supply chains?
2. Which type of information is exchanged between companies in the supply chains?
3. Which reasons explain the formation of supply chains in the South African retail industry?
4. Which activities and processes are coordinated in the supply chains?
5. What are the barriers and enablers for implementing supply chain management in the South African retail industry?
6. Which performance metrics are used in the supply chains?
7. Which management accounting practices are associated with the supply chains in the South African retail industry?

#### 6.1.0 Background

#### 6.1.1 An overview of South African retail industry

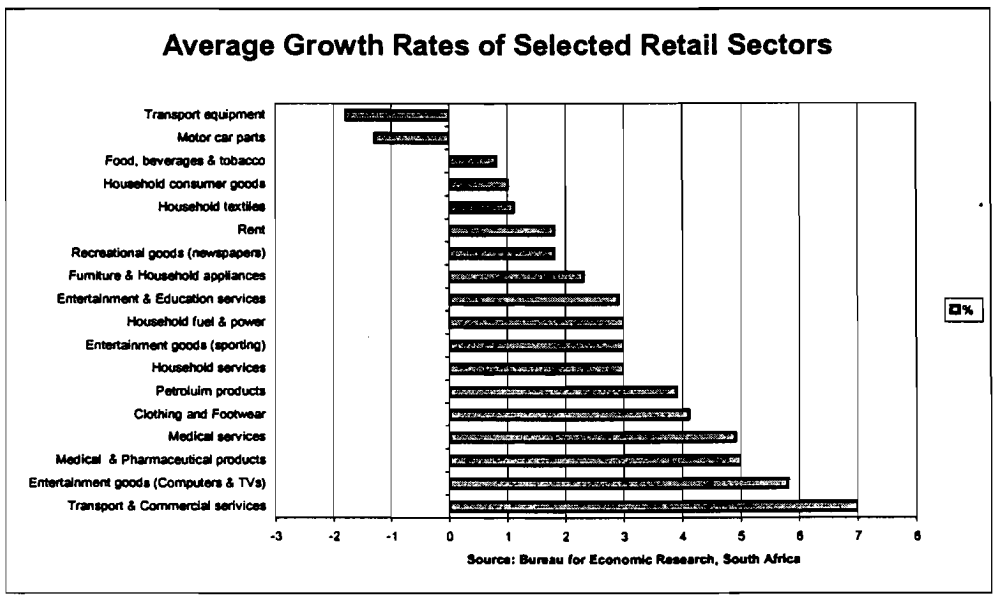
The South African Retail Industry is divided into three main sectors namely the Apparel/Textile, Furniture/Durable and Food/Fast-Moving Consumer Goods (FMCG) sectors. The Textile sector is divided into clothing, footwear and accessories. The goods traded in the FMCG are categorized into perishables, dry goods, toiletries and general merchandise. The Furniture/Durable sector includes all durable housewares. The focus of

this research is on the FMCG and the Textile sectors, thus the rest of the details presented henceforth pertain to these two sectors.

The year 2001 saw the South African retail industry recording the most difficult trading conditions in 40 years. Most of the shares listed on the Johannesburg Stock Exchange's retail sector had cheap price-to-earnings ratios, and most leading Stockbrokers were recommending selling the shares. There has been a steady decline in retail spend over the past 14 years, as shown by the decline in retail industry's share of final consumption expenditure (FCE) – the amount of money that South Africans spend each year – despite a growth in FCE of 8% in 2000 to R51.1 billion. The total retail industry's share has been gradually dwindling from a high of 48% in 1985 to about 42% in 1999. Table 6.3 below shows the growth rates in the retail sector. The figures show that the growth in the FMCG sector (food, beverages & tobacco) is no more than 1%. The textile sector (household textiles, clothing & footwear) has mixed fortunes in that the household textiles' growth is just above 1% while the clothing and footwear growth is slightly above 4%. Thus the figures show that the growth in the two sectors, the FMCG and textile, is way below the growth in other sectors.

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**Table 6.3**



The decline in FCE has been attributed to changes in the global economic conditions, the South African economy, and more importantly on the changing spending habits of South Africans. Therefore an examination of the South African consumer spending habits and preferences would shade some light on the situation in the two retail sectors.

### 6.1.2 The South African consumer

The consumers in South Africa can be divided into two categories or tiers namely the upper-earning and the lower-earning consumers. The upper-earning consumers' spending is interest rate sensitive, while the lower-earning consumers' spending is employment sensitive.[15] While interest rate cuts in 2001 by the South African Reserve Bank boosted the income and confidence of the upper-earning consumers, the huge numbers of layoffs that have been experienced in the lower-earning consumers have subdued recovery in consumer confidence. Those still employed in both classes of consumers have changed their spending patterns with time due to concerns over borrowing and spending. Even the growth in the micro-lending industry has not stimulated lower-earning consumers as the money borrowed is only enough to fund living expenses.

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Dampened consumer confidence has been coupled with other discretionary spending such as gambling in casinos, lottery, and cellphones. Fuel price increases have also eroded the buying power of the debt-ridden lower-earning consumers, as evidenced by an increase in transport spend from an average of 10% to 22% in eighteen months in 2001. The AIDS epidemic in South Africa has also further eroded the purchasing power of most consumers. Inevitably a change in the spending patterns of both the upper- and lower-earning consumers has resulted in less money being spent in the retail sector, especially the clothing sector. The retail sector is therefore struggling with consumer spend dwindling on one hand, and high cost structure on the other. Other issues worsening the plight of the sector are lower finance earnings, price-driven margin-slashing sales campaigns, and poor operational skills, e.g. stock control. Margin-slashing sales campaigns have not yielded the desired result due to low sales volumes.

[15] A quarterly Review of the South African Retail Sector, Second quarter, 2001 – Merril Lynch.

The above problems have been felt by the two retail sectors and particularly in the clothing sector where costs have continued to rise due to the fall of the Rand (this sector imports material mostly from Europe and Asia), against the US dollar and the Euro, yet consumers are looking for even greater value for their money. The main coping mechanism of retailers has been to strip out the cost base through cutting the margins of manufacturers (manufacturers) to the extent that further cost cuts are becoming extremely difficult to achieve (a significant number of manufacturers have gone under as a result). Even when achieved, such cost savings are so small that they yield very little. Consequently, the key to the long-term survival appears to be the proper and careful management of the merchandise function in both the clothing and FMCG sectors.

### 6.1.3 The clothing sector

South Africa has opened up its borders and as a result, trade between South Africa and its manufacturers in the East significantly increased, thus putting the local textile manufacturing industry under pressure. The Eastern countries are manufacturing merchandise cheaply, despite a weak Rand that should make South African exports cheaper. The manufacturing base in South Africa has started to decline as a result of competition from the Eastern countries. Consequently the merchandise retailers in South Africa are facing a problem of securing goods locally due to a declining supply base, and thus are now keen to capture their own local supply source.

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There are some retailers that do not have a core supply due to shrinking of the local supply base. Relying on imports is problematic due reliability issues caused by the distance that the merchandise has to go through resulting in delays and quality problems that cannot be quickly solved. The retailers are interested in having local manufacturers that are reliable and who can give them a quick turnaround and good quality. The retailers, who are very dominant and compete among themselves in the clothing sector, are keen to have dedicated manufacturers instead of buying from manufacturers who are also supplying other retailers due to difficulties in differentiation of designs, i.e. a manufacturer supplying several retailers may not be able to produce a garment in fashion in significantly different designs – the "writing problem" – hence the retailers may end up

getting more or less the same garment design and colour. Also retailers' ideas may end up being used by other retailers due to sourcing from the same manufacturers. Consequently, retailers are keen to forge close ties with manufacturers such that a retailer has exclusive access to the skills of the manufacturers. In this close relationship, a manufacturer interprets fashion in a certain way, just for the retailer and does not use the ideas for other retailers. The retailer gets the best that the manufacturer can offer, which enables the retailer to attract the end-use customer with the best garments.

### 6.1.4 The food/FMCG sector

The FMCG sector on the other hand has been growing due to several factors that include the ability of the retailers to transfer price increases to end-use customers, and the decline in the popularity of cash and carry stores. The market growth in 2001 was about 9%[16] per year. However, the current price increases in food items, transport & fuel, and interest rates have eroded consumer spending power significantly. Thus this sector also faces huge pressures to provide goods that are affordable to the majority of South Africans.

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## 6.2 THE STUDY

The purpose of the study was to establish the current supply chain management practices in the South African retail industry. The study focused on establishing the presence of collaborative practices and the extent to which such practices are applied in the retail sector from the perspective of retailers. It was felt that since retailers have more power over their key manufacturers derived from their size, any supply chain management practices currently applied in the retail sector would have been greatly influenced by them. Thus by focusing on retailers it was felt that more insight would be gained into the current supply chain management practices in the retail industry.

A survey instrument – a questionnaire - was sent to eight large retailers, four in the FMCG and four in the textile sector. The four retailers in the FMCG sector constitute about 85% of the South African food market and the four retailers' market share in the middle-to-upper textile sector market is about 70%. The middle-to-upper textile market

[16] Source: Bureau for Economic Research, South Africa

was chosen for the study because of its formalised way of doing business. The lower textile market is composed of mainly an informal sector where supply chain management practices are likely to be non-existent. The administration of the questionnaire involved phoning the respondents first before sending the document. A total of six retailers replied, four in the FMCG sector and two in the textile sector. The other two retailers in the textile sector cited confidentiality reasons for not participating in the survey. However, this is despite having agreed to answer the questionnaire when spoken to over the phone.

The respondents in each retailer were from different functions – operations, procurement and finance. The position occupied the respondents were Buyers, Supply Chain Executive, Operations Manager, and Management Accountants. Questions that each of the respondents were asked focused on their perception of and/or their experience of the relationship they have with key manufacturers.

The survey involved the administration of a questionnaire that was divided into different sections (sections A to M) according to specific themes. The themes related to a number of supply chain management issues that reflected an array of factors affecting workflow and information flow among levels of the supply chain, as well as measures of supply chain performance (Spekman *et al*, 1998), and management accounting practices. Although the questionnaire was divided into different sections, collectively they reflect a continuum of activities that give an insight into the supply chain management practices in the South African retail industry by answering research sub-questions 1 to 7. Thus issues dealt with in these sections help in the examination of aspects of supply chain management practices that would indicate where exactly the relationships between retailers and their key manufacturers are, i.e. are they in level one, two, three or four, according to Poirier, (1998).

In most of the sections, respondents were asked to rank given statements (supply chain practices) on a scale of 1 (least important) and 7 (most important) by simply ticking a corresponding box.

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## 6.3 RESULTS

The survey results show that most of the goods traded in the FMCG are sourced locally with the exception of one retail company that imports 20% of its dry goods. In the textile sector surveyed however, a significant proportion of merchandise traded is imported. The numbers of manufacturers (manufacturers) in the FMCG range from 300 to 4000 in total per merchandise retailer (retailer). Out of the total number of manufacturers in the FMCG, foreign-owned suppliers range between 1% and 30%. Key manufacturers constitute about 15% of total suppliers. In the textile sector the number of manufacturers is far below that in the FMCG, ranging between 50 and 250. However foreign-owned manufacturers in the textile sector are more or less the same number as in the FMCG, ranging between 2% and 30%. Key manufacturers in the textile sector range between 20% and 90%. These figures reveal that in the FMCG sector, there are many manufacturers per retailer, and only a few of them are regarded as key manufacturers. In the textile sector retailers have a few manufacturers who supply them, and most of them are seen as key suppliers. It appears therefore that the textile sector has made significant strides in rationalizing its supply base by doing business with a few key manufacturers. However, it may also be an indication of the shrinking supply base, both local and overseas, which leaves retailers in the textile sector with fewer manufacturers.

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In both sectors retailers indicated that most of their relationships with manufacturers are established in the sense that they have been trading with the manufacturers for a long time. Most of the trading relationships are between six and more than fifteen years old, and are governed by the use of written contracts. Three of the retailers indicated that no change in their relationship with manufacturers has taken place in the last two years, and the other three said that they were closer than they were in the last two years. As far as satisfaction with their manufacturers is concerned, three out of the six retailers indicated that they were indifferent, two were very satisfied and one was very dissatisfied. Thus generally it appears there is a certain level of satisfaction that the retailers enjoy in their relationship with manufacturers that keeps them trading with them as shown by the age of their relationships. The rest of the results are presented according to specific research questions as discussed earlier.

### 6.3.1 Sub-problem 1

*What sources of competitive advantage are regarded as key within the South African retail industry supply chains?*

**Sources of competitive advantage**

It was necessary to understand the sources of competitive advantage most valued by retailers in order to understand their attitude towards their relationship with manufacturers. It was also done to understand the kind of pressures that retailers are facing in their effort to serve the increasing demands of consumers. A source of competitive advantage would be expected to go beyond the cost of procuring merchandise from the manufacturers and the price charged to consumers. In order to accomplish this, respondents were asked to rank sources of competitive advantage on a scale of 1 to 7 and the results are presented separately according to the sector, i.e. the FMCG and the textile sectors because of differences in the products they sale as well as the operating environments they face.

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**Sources of competitive advantage in the FMCG sector**

Tables 6.4 to 6.7 below present the ranking of sources of competitive advantage according to perishables, dry goods, toiletries and general merchandise categories. The individual scores of sources of competitive advantage are expressed as a percentage of maximum possible score to allow comparison. The maximum expected score is 28 for the FMCG (4 respondents multiplied by the maximum rank value of 7). The data show a consistent ranking of the different sources of competitive advantage.

**Table 6.4 Sources of competitive advantage for perishables**

| Perishables | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Price | 18 | 64.29 | 3 |
| Quality | 26 | 92.86 | 1 |
| Exclusivity | 20 | 71.43 | 2 |
| Differentiation | 16 | 57.14 | 4 |

Table 6.5 Sources of competitive advantage for dry goods

| Dry Goods | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Price | 18 | 64.29 | 3 |
| Quality | 26 | 92.86 | 1 |
| Exclusivity | 19 | 67.86 | 2 |

Table 6.6 Sources of competitive advantage for toiletries

| Toiletries | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Price | 12 | 42.86 | 3 |
| Quality | 19 | 67.86 | 1 |
| Exclusivity | 16 | 57.14 | 2 |

Table 6.7 Sources of competitive advantage for general merchandise

| General Merchandise | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Price | 19 | 67.86 | 3 |
| Quality | 26 | 92.86 | 1 |
| Exclusivity | 25 | 89.29 | 2 |
| Differentiation | 18 | 64.29 | 4 |

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Quality was regarded as the most important source of competitive advantage in all the categories of perishables, dry goods, toiletries and general merchandise. The second source of competitive advantage was exclusivity and then followed by price. For perishables and general merchandise, differentiation was the last source of competitive advantage.

**Sources of competitive advantage in the textile sector**

The same sources of competitive advantage were evaluated in the textile sector in the clothing, footwear and accessories categories. Since only two retailers replied, the maximum possible score is 14 for the textile sector (2 times maximum rank value of 7). Tables 6.8 to 6.10 below present the findings and show a slightly different picture from the FMCG sector. In this sector, competitive advantage appears to be derived mostly

from exclusivity in all merchandise categories, with a slight difference in the clothing sector where quality is ranked as equally important. Thus it would appear that retailers would want to make product offerings that are unique. Price does not seem therefore to be an important factor since once something is unique, then consumers may not give emphasis to price when considering whether to buy or not.

**Table 6.8 Sources of competitive advantage for clothing**

| Clothing | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Price | 6 | 42.86 | 4 |
| Quality | 12 | 85.71 | 1 |
| Exclusivity | 12 | 85.71 | 1 |
| Differentiation | 9 | 64.29 | 3 |

**Table 6.9 Sources of competitive advantage for footwear**

| Footwear | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Price | 6 | 42.86 | 4 |
| Quality | 11 | 78.57 | 2 |
| Exclusivity | 12 | 85.71 | 1 |
| Differentiation | 10 | 71.43 | 3 |

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**Table 6.10 Sources of competitive advantage for accessories**

| Accessories | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Price | 6 | 42.86 | 4 |
| Quality | 10 | 71.43 | 2 |
| Exclusivity | 11 | 78.57 | 1 |
| Differentiation | 9 | 64.29 | 3 |

The emphasis on exclusivity underpins the retailers' desire to have dedicated local manufacturers so that their ideas are not shared with other retailers. This also underscores the need to create long-term collaborative relationships that will enable retailers to get exactly what they want from manufacturers.

### 6.3.2 Summary of results

A *t*-Test of both the results in the FMCG and textile sectors was done to find out whether the differences in the importance attached to the sources of competitive advantage were significant at 5% confidence level. This was done to exclude differences that could have arisen due to chance. In all the merchandise categories, the *t*-Test showed that there was no statistical difference at the 5% confidence level.

The implication of the *t*-Test result is that quality, price, differentiation and exclusivity are all equally important and are also interrelated in any product category offering. (Although in most cases differentiation and exclusivity may not be common in food items, there appears to be attempts by retailers to offer food items that are unique, e.g. bread that has certain vitamins added, milk from cows that are bred in a special way, beef from free range cattle, etc.). In other words, products are being offered to the end-use customer as a package that takes quality, price, differentiation and exclusivity as equally important. This may be an indication of the level and nature of competition in the retail sector as well as consumer expectations/demands where one source of competitive advantage is not enough for survival.

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## 6.4 Supply chain management practices in both the FMCG & textile sectors

This section presents combined results of both the FMCG and the textile sectors because the objective of the survey was to have a general picture of the supply chain management practices in the South African retail industry. For the purposes of comparing the strength of each practice, the individual scores of the practices are expressed as a percentage of the maximum possible score. Since this section combines responses from retailers in both sectors, the maximum possible score is 42 (6 retailers times the maximum rank value of 7). The following sections address sub-problems 2 to 7.

### 6.4.1 Sub-problem 2

*What types of information flows occur between companies in the supply chains, and which type of information is exchanged?*

**(a) Supply chain information flows**

It was necessary to understand the flows of information along the supply chain between retailers and manufacturers in terms of the physical flow of merchandise, concomitant costs, delivery, and manufacturers' satisfaction measures. Table 6.11 below summarises the practices related to information flow between retailers and their manufacturers. Supply chain practices valued highly were tight information linkage with manufacturer, followed by order entry & order tracking technology, and electronic data interchange (EDI) with manufacturers, both ranked number two. The least valued practice was merchandise cost, quality and delivery tracking.

**Table 6.11 Supply chain information flows**

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| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Tight linkages with your manufacturers | 35 | 83.33 | 1 |
| Purchase order information tracking | 32 | 76.19 | 4 |
| Merchandise cost, quality and delivery tracking | 27 | 64.29 | 6 |
| Manufacturer satisfaction measures | 31 | 73.81 | 5 |
| Order entry and order tracking technology | 33 | 78.57 | 2 |
| Electronic data interchange (EDI) with supplier | 33 | 78.58 | 2 |

The results show that there is a healthy information flow between retailers and manufacturer. All the measures of the information flow were regarded highly (as shown by the high percentages). Tight linkages with manufacturer could be an indication of frequent communication between the retailers and manufacturers. Retailers are also concerned about information related to purchase orders as shown by the high value attached to order entry and order tracking technology, i.e. information that traces the movement of merchandise from the raw material to finished goods state. Emphasis on

tracking the movement of merchandise suggests a focus on managing problems along the logistical pipeline to avoid delays.

**(b) Buyer-supplier disclosure of proprietary information**

Disclosure of proprietary information is expected in a close, trust-based relationship between retailers and their key manufacturers. Thus the extent to which such sensitive information is shared not only gives an indication of the level of trust in the relationship, but also strengthens the trust between the companies along the supply chain. Table 6.12 summarises the extent of information shared from the retailers to their manufacturers and vice versa.

**Table 6.12 Retailer-manufacturer disclosure of proprietary information**

| | Full disclosure | Limited disclosure | On a need-to-know basis only | None |
|---|---|---|---|---|
| **From you to your key suppliers:** | | | | |
| • New product development | 3 | 2 | 1 | 0 |
| • Future business plans | 3 | 1 | 2 | 0 |
| • Long-term supply requirements | 6 | 0 | 0 | 0 |
| **From your key suppliers to you:** | | | | |
| • New product development | 5 | 1 | 0 | 0 |
| • Future business plans | 5 | 1 | 0 | 0 |
| • Long-term supply requirements | 5 | 1 | 0 | 0 |

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The majority of retailers fully disclose new product development, future business plans and long-term supply requirements information to their manufacturers. A few disclose future business plans and new product development information on a limited scale and on a need-to-know basis. The majority of retailers indicated that their manufacturers disclose fully new product development, future business plans and long-term supply requirements information. Only one retailer indicated limited disclosure on all three information categories. The level of disclosure of proprietary information is higher from manufacturers to retailers than the other way round. Thus it would appear that both retailers and manufacturers are keen to involve each other in new product development and future business plans.

### 6.4.2 Summary of results

The results on the sharing of information between retailers and manufacturers appear to indicate willingness on both parties to share confidential information such as future business plans. These results largely confirm what is suggested in literature in that a tightly integrated supply chain entails free information flow. The sharing of future business plans implies the presence of collaboration and a sense of destiny principles of partnership.

### 6.4.3 Sub-problem 3

*Which reasons explain the formation of supply chains in the South African retail industry?*

**(a) Reasons to engage in supply chain management**

The motive for engaging in supply chain management may have an impact on the success of the relationship between retailers and their manufacturers. Thus it was important to ask retailers the reason why they entered into supply chain relationships with manufacturers. Table 6.13 shows that increased end-use customer satisfaction, improved profits, reduced overall operating costs, and reduced lead-time were all ranked number one, followed by the need to secure a reliable source of merchandise. Improved productivity and increased margins both ranked number three, while the need to gain strategic marketing and reduce product development costs ranked 9th & 10th respectively.

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The results show that retailers are keen to reduce costs as a way of enhancing their bottom line. This is an important development in the retail sector where in the face of adverse trading conditions the main coping mechanism has been margin slashing sales campaigns. By focusing on both the revenue generation (increased end-use customer satisfaction) and the cost reduction sides of the supply chain, the retailers are indicating that they want to generate profits by satisfying end-use customers through improved supply chain processes.

**Table 6.13 Reasons to engage in supply chain management**

| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Increased end-use customer satisfaction | 39 | 92.86 | 1 |
| Improved profits | 39 | 92.86 | 1 |
| Secure reliable source of merchandise | 37 | 88.10 | 4 |
| Reduce overall operating costs | 39 | 92.86 | 1 |
| Gain strategic marketing | 28 | 66.67 | 9 |
| Reduce lead-time | 37 | 88.10 | 4 |
| Low price paid per item | 29 | 69.05 | 8 |
| Improved productivity | 32 | 76.19 | 6 |
| Increase margins | 32 | 76.19 | 6 |
| Reduce product development costs | 25 | 59.52 | 10 |

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Even though reasons such as gain strategic marketing and reduce product development costs were ranked low, they are still regarded as important (as shown by scores above 50 percent). Cost reduction (resulting in improved profits) through the selection of an appropriate supply chain partner is seen as very important. Retailers are keen to engage manufacturers who are reliable suppliers of product as supply chain partners in their quest for satisfying end-use customers.

**(b) Overall supply chain relationships**

The extent to which retailers and manufacturers regard each other as important in achieving success in the supply chain is critical in understanding the attitude of each party to the other. Without recognizing that each party's success depends on the role played by the other, companies along a product's supply chain are likely to act in their best interest and to the detriment of the others. Thus it was essential to understand the extent to which retailers not only recognize the importance of mutual dependence between themselves and manufacturers, but also appreciate the significance of mutual dependence in their success.

**Table 6.14 Overall supply chain relationships**

| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Merchandise we procure from these suppliers are important to our company | 38 | 90.48 | 1 |
| These suppliers are essential to our future success in this business | 38 | 90.48 | 1 |
| These supply chain members can easily be replaced | 17 | 40.48 | 4 |
| We can easily replace these suppliers with overseas suppliers (this refers to locally-owned suppliers) | 15 | 35.71 | 5 |
| We can easily replace these suppliers with locally-owned suppliers (this refers to foreign-owned suppliers, whether resident in S.A or not) | 15 | 35.71 | 5 |
| We make our key suppliers compete to supply the same merchandise | 20 | 47.62 | 3 |

From Table 6.14 above it is apparent that retailers regard their manufacturers as essential to the future of their businesses and value as important the input from manufacturers. There is also strong evidence of the dependence between retailers and their manufacturers as shown by the low value attached to the ease with which retailers can replace their key manufacturers. However, retailers make their key suppliers (wherever possible) compete to supply the same merchandise. This could be an indication that some of the relationships between manufacturers and retailers are not yet exclusive, but perhaps are in transit, considering other practices that indicate some degree of closeness.

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**(c) Supply chain partner selection**

Table 6.15 below summarises the importance attached to specific reasons considered by retailers in selecting manufacturers to be part of their supply chains. Factors that are considered when selecting a supply chain partner impact on the nature and the long-term survival of the relationship, i.e. whether the relationship will be expected to the collaborative and based on a win-win situation. Reasons related to short-term gains by one party may not support the long-term view and the partnership principles expected in a supply chain relationship.

**Table 6.15 Supply chain partner selection**

| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| They are trustworthy | 36 | 85.71 | 4 |
| They know our business | 37 | 88.10 | 3 |
| They are reliable and consistent in dealing with us | 39 | 92.86 | 1 |
| They support the importance we give to customer service | 39 | 92.86 | 1 |
| They have potential synergy with us | 33 | 78.57 | 6 |
| They are committed to us | 36 | 85.71 | 3 |
| Systems integration capabilities of suppliers | 19 | 45.24 | 8 |
| Global presence of suppliers | 13 | 30.95 | 9 |
| Quality of merchandise supplied | 24 | 57.14 | 7 |

As shown in Table 6.15 above, ranking high were reliability & consistency (perhaps an indication of issues that affect trust between manufacturers and retailers), and the importance that manufacturers give to customer service. Retailers are interested in manufacturers who understand that the ultimate aim is to satisfy the end-use customer, and who can be relied upon to be consistent in the way they conduct business with retailers. The issue of trust and the commitment required of the manufacturers indicate the desire of the retailers to reduce opportunistic behaviour on the part of manufacturers. Global presence of the manufacturers was the least important factor influencing the decision of the retailers to have a supply chain relationship with manufacturers. This is consistent with the composition of key manufacturers in the retail industry where most of them are local, as well as the change in the focus of the textile industry from foreign to local manufacturers.

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### 6.4.4 Summary of results

The main reasons influencing the formation of supply chains and the selection of partners are the desire by retailers to improve end-use customers' satisfaction, reduce costs and improve their profitability. Consequently, retailers select manufacturers who (1) can be

relied upon to deliver the right product on time (reduced lead-time), (2) know the business of the retailers well, (3) are committed to the relationship, (4) can be trusted and (5) equally value the importance of end-use customers.

### 6.4.5 Sub-problem 4

*Which activities and processes are coordinated in the supply chains?*

#### (a) Supply chain management processes

Supply chain management processes are concerned with the behaviours that support the relationship between retailers and manufacturers that have an impact on collaborative practices in the supply chain. Table 6.16 below gives the processes that the respondents were asked to rank.

**Table 6.16** Supply chain management processes

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| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| We expect the relationship to last a long time | 37 | 88.10 | 4 |
| There is continuous contact between our company and our manufacturers | 38 | 90.48 | 1 |
| Sustaining this relation is important to us | 38 | 90.48 | 1 |
| We are willing to devote extra effort to this relationship | 35 | 83.33 | 6 |
| We share a similar sense of fair play with our key manufacturers | 34 | 80.95 | 7 |
| We periodically evaluate the importance of the relation we have with our key suppliers | 37 | 88.10 | 4 |
| We believe these manufacturers act in their own best interest | 31 | 73.81 | 8 |
| Risks are shared equally between us and each manufacturer | 23 | 54.76 | 9 |
| Personnel from our company are in our key manufacturers' product design team | 20 | 47.62 | 10 |
| Rewards are shared equitably between us and each key manufacturer | 15 | 35.71 | 11 |
| Communication between us and these manufacturers is frequent | 38 | 90.48 | 1 |

The results in Table 6.16 above show that the common behaviours that support the relationship between retailers and manufacturers are continuous contact through frequent communication. The companies regard sustaining their relationships as important and are willing to devote extra effort into these relationships. There is also an expectation that their relationships will last long (an indication of a growing relationship in which the future is more important than the present). This expectation appears to be supported by periodic evaluation of the relationships. Thus retailers appear to be interested in taking a long-term view of their relationship with manufacturers.

However, retailers indicated that rewards and risks are not shared equally between them and manufacturers. This is supported by the ranking of a sense of fair play with manufacturers so lowly. This could an indication of the power differences between retailer and manufacturers as well as the fewer number of key manufacturers with which the sharing of rewards is based on a win-win situation. They also indicated that they have very little involvement in their manufacturers' product design. Again this could be due to the high numbers of manufacturers with which retailers do not have joint product development with.

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**(b) Joint problem solving**

Questions asked in this section were meant to provide a measure of the attitude of retailers towards solving problems jointly with their manufacturers. The measures of attitude used ranged from 'no extent' (assigned a weight of 1) to 'greater extent' (assigned a weight of 4). An overall measure of the extent of joint problem solving was determined first, followed by specific areas of joint problem solving. The result of the overall measure of joint problem solving is presented in Table 6.17.1 below, and Table 6.17.2 presents the results of specific areas of joint problem solving. Table 6.17.1 shows that to a greater extent, retailers involve their manufacturers in joint problem solving. This measure however does not show exactly where, within the operations of retailers and manufacturers, collaboration is being practiced to deal with common problems. Thus it was necessary to probe further to identify areas where retailers and their manufacturers are collaborating to solve common problems, as shown in Table 6.17.2 below. The

individual scores are based on a scale of 1 (no extent) to 4 (greater extent) and show the areas and extent of joint problem solving between retailers and their key manufacturers. These results are very important in understanding the nature of the relationships between retailers and their key manufacturers in planning the terms by which their future business is determined. Important areas such as cost management and productivity of the supply chain appear to be ignored, which may mean that retailers and their manufacturers have not yet embraced supply chain management as of strategic importance.

**Table 6.17.1 Overall joint problem solving**

| | 1 | 2 | 3 | 4 | (a) | (b) | |
|---|---|---|---|---|---|---|---|
| | No extent | Limited extent | Some extent | Greater extent | Total Score | Maximum possible Score | % a/b |
| We plan together the terms by which our future business relationship will be determined | 0 | 2 | 15 | 0 | 17 | 24 | 70.83% |

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**Table 6.17.2 Joint problem solving in specific areas**

| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| We make joint decisions about: | | | |
| 1) cost efficiencies | 14 | 58.33 | 3 |
| 2) order entry procedures | 16 | 66.67 | 2 |
| 3) delivery scheduling | 19 | 79.17 | 1 |
| In this relationship, both sides work together to achieve productivity gains from which both sides benefit | 13 | 54.17 | 4 |

Therefore, the level of joint problem solving is high (individual scores are above 50 percent, thus support the measure of overall joint-problem solving). Joint problem solving is however, emphasised on delivery scheduling and order entry procedures i.e. making the interface between retailers and manufacturers efficient.

**(c) Merchandise price-setting approaches**

Price-setting mechanisms employed by retailers and their manufacturers indicate the nature of their relationship, i.e. whether it is based on a win-win situation or influenced by power relations. The mechanisms chosen should indicate a focus on pie growing rather than pies sharing, i.e. in a partnership relationship; both parties are expected to share the fruits of their relationship in an equitable manner. Thus the price setting mechanisms used should also reflect a desire to create a win-win relationship. The respondents were asked to rank price-setting mechanisms on a scale of 1 to 7, and Table 6.18 below summarises the results.

**Table 6.18 Merchandise price-setting approaches**

| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| **Merchandise prices based on:** | | | |
| Previous price | 28 | 66.67 | 3 |
| Competitive bids | 24 | 57.14 | 4 |
| Production costs analysis | 22 | 52.38 | 5 |
| Target merchandise price | 30 | 71.43 | 2 |
| Negotiation | 35 | 83.33 | 1 |

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Price negotiation is the mechanism mostly used, followed by previous price and then target price. Competitive bids are fairly used and product cost analysis is not that commonly used. The emphasis given to negotiated prices may be an indication of the limited use of power in the process of setting merchandise prices. However, without insight into how the negotiation process takes place, it is not possible to tell whether the process is based on a fair negotiation platform where the aspirations of both sides are taken into account. The use of target merchandise price is an indication of the pressure that retailers encounter in the market.

**(d) Relationship-specific investment**

The presence and extent of relationship-specific investment indicates the extent to which retailers and manufacturers collaborate and trust each other. Without a close collaborative relationship based on trust, companies along the product's supply chain would be reluctant to invest in assets that may have little use outside the relationship. Therefore it was necessary to investigate the extent to which retailers have invested in relationship specific assets. The respondents were asked to rank on a scale of 1 'strongly disagree' to 4 'strongly agree' the level of relationship specific investments that they have made in their relationships with manufacturers.

The summarized results in Table 6.19 show that retailers have made significant relationship specific investments in their ordering systems as well as inventory management. Retailers have also expended significant effort tying to improve their relationships with manufacturers.

**Table 6.19 Relationship-specific investment**

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| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| We devote considerable time trying to improve our relationship with key manufacturers | 19 | 79.17 | 2 |
| We devote considerable time trying to improve our key suppliers' productivity | 18 | 75.00 | 3 |
| We have made a substantial number of adaptations in our ordering system and/or inventory management system in order to deal more effectively with our key manufacturers | 22 | 91.67 | 1 |

The fact that retailers have invested in relationship-specific investments is an encouraging development because it indicates their desire to have a long-term collaborative relationship with their key manufacturers. This is also an indication of the trust that they have in the future of their relationships with key manufacturers because without trust, retailers would be reluctant to invest in assets that would have little or no value in other relationships.

### 6.4.6 Summary of results

The relationships between retailers and manufacturers are characterised by continuous contact through frequent communication. There is also considerable effort being spent in building the relationships as they are regarded as important. Periodic evaluations of these relationships appear to be supporting the effort spent in building them. There is a high level of joint problem solving within these supply chains, particularly regarding delivery scheduling and order entry procedures. These processes are meant to make the interface between retailers and manufacturer efficient (consistent with the importance given to reduced lead-times and end-use customer satisfaction). Cost efficiencies are also seen as important and thus requiring a joint effort. The price-setting mechanism commonly used is negotiation, followed by target price. This could be an indication of the use of price pressures faced by retailers in the market, resulting in the use of target prices that are then negotiated. In these supply chain relationship, there is a high level of relationship-specific investment, indicating that the level of trust between retailers and manufacturers could be high.

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### 6.4.7 Sub-problem 5

*What are the barriers to, and enablers for, implementing supply chain management in the South African retail industry?*

**Assessment of drivers**

Drivers are strategic factors resulting in competitive advantage in a collaborative relationship between retailers and key manufacturers. These are factors that make retailers and manufacturers believe that they stand to benefit only if they are in a win-win relationship. Areas that have potential to generate benefits in inter-company relationships are customer service improvements, asset/cost efficiencies, profit stability/growth and marketing advantage (Lambert *et al*, 1996). Therefore it was necessary to examine the extent to which these factors are present in the relationships between retailers and manufacturers.

**(a) Asset/cost efficiency**

This section focused on the potential of the relationship between manufacturers and retailers to reduce costs such as transport, information, packaging, handling and product costs. Improved managerial efficiencies and use of specialized equipment and process were also examined and the results are shown in Table 6.20 below.

**Table 6.20** Asset/cost efficiency

| | Probability | | | | |
|---|---|---|---|---|---|
| | No chance | | | | Certain |
| **Asset/cost efficiency** | 0% | 25% | 50% | 75% | 100% |
| What is the probability that the relationship with your key manufacturers will substantially reduce cost or improve asset utilisation? | 0 | 2 | 1 | 2 | 1 |
| **Specific areas:** | | | | | |
| Product cost savings | 0 | 4 | 0 | 1 | 1 |
| Distribution cost savings | 0 | 3 | 1 | 1 | 1 |
| Handling cost savings | 0 | 3 | 1 | 1 | 1 |
| Packing cost savings | 0 | 3 | 1 | 1 | 1 |
| Information handling cost savings | 0 | 3 | 2 | 0 | 1 |
| Management efficiencies | 0 | 3 | 0 | 2 | 1 |

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Four out of six respondents were 50% and above certain that their relationships with key manufacturers will result in a substantial cost reduction and/or an improvement in asset utilization. On specific cost savings, the results are mixed in that half of the retailers were less optimistic about the ability of their relationships with manufacturers to result in savings in product, distribution, handling, packing and information handling costs, as well as management efficiency. The confidence level of the other half of the retailers ranged from being fairly confident to being certain that their relationships with manufacturers will result in cost savings in the same specific categories.

There is an apparent contradiction between the optimism that the overall impact of the relationship between retailers and manufacturers will be in cost reduction and/or efficient utilization of asset, and the pessimism expressed in specific areas of cost reduction. Cost reduction in the specific areas is expected to culminate in the overall cost reduction. The

reason for this contradiction could be that retailers are not sure how cost reduction will be achieved and in which specific areas, even though they are optimistic that it will be attained.

**(b) Customer service**

Integrated activities and processes across the supply chain create customer value through timely and more accurate information, shorter cycle times and improved response time that translate into improved customer service. It was therefore necessary to evaluate the potential in the relationship between retailers and their manufacturers to improve customer service. Nearly all retailers were optimistic that their relationship with manufacturers will result in substantially improved customer service. They believed that there is 75% chance of improved on-time delivery, tracking movement, use of paperless orders, cycle times, accurate order placement, and process improvement. The results as shown in Table 6.21 below are in line with the criteria of choosing manufacturers as shown in Table 6.13 on page 114.

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**Table 6.21** Customer service

| | Probability | | | | |
|---|---|---|---|---|---|
| | No chance | | | | Certain |
| **Customer service** | 0% | 25% | 50% | 75% | 100% |
| What is the probability that the relationship with your key suppliers will substantially improve customer service level? | | | | | |
| **Specific areas:** | | | | | |
| Improve on time delivery | 0 | 0 | 0 | 6 | 0 |
| Better tracking movement | 0 | 0 | 1 | 5 | 0 |
| Paperless order placing | 0 | 1 | 0 | 5 | 0 |
| Improved cycle times | 0 | 0 | 1 | 5 | 0 |
| Accurate order placement | 0 | 0 | 0 | 5 | 1 |
| Process improvements | 0 | 0 | 0 | 6 | 0 |

Retailers indicated that they chose manufacturers on the basis of; (1) the support that manufacturers give to the importance given to customer service by retailers, (2) the potential synergy they have with manufacturers, (3) the reliability of manufacturers, and

(4) consistency with which manufacturers deal with retailers. Therefore retailers prefer manufacturers who can be trusted that they will deliver the right product at the right quantity, quality, agreed price and on time, enhance the ability of retailers to improve customer service.

**(c) Marketing advantage**

A close relationship between retailers and their key manufacturers has the potential to enhance the parties' ability to gain strategic marketing due to better access to technology and innovation, relative (to competing supply chains) ease entry into new markets and improved marketing mix (Lambert *et al*, 1996). This section thus looks at the marketing advantages that accrue to retailers and their key manufacturers as a result of their relationships. As shown in Table 6.22 below, most retailers indicated that, the chance of obtaining a substantial marketing advantage from their relationship with manufacturers was fairly high (50% - 75%).

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**Table 6.22** Marketing advantage

| | Probability | | | | |
|---|---|---|---|---|---|
| | No chance | | | | Certain |
| **Marketing advantage** | 0% | 25% | 50% | 75% | 100% |
| What is the probability that the relationship with your key suppliers will lead to substantial marketing advantage? | 0 | 0 | 2 | 2 | 0 |
| **Specific areas:** | | | | | |
| New market entry | 1 | 0 | 2 | 2 | 1 |
| Price (better price advantage) | 0 | 2 | 1 | 3 | 0 |
| Product (joint product development) | 0 | 1 | 1 | 4 | 0 |
| Place (expanded geographical coverage) | 3 | 1 | 1 | 1 | 0 |
| Access to technology | 0 | 4 | 2 | 0 | 0 |
| Innovation potential | 0 | 1 | 3 | 2 | 0 |

The majority of retailers were confident that they will obtain marketing advantage in new market entry, better price advantage, product development, and innovational potential. It is interesting to note that retailers are confident that their current relationship will yield these benefits in future, indicating a growing relationship. However, retailers were less

optimistic that their relationships with manufacturers will enhance their ability to expand their geographical coverage and access to technology.

**(d) Profit growth/stability**

The presence of factors that lead to profit growth and/or stability in the relationship between retailers and their key manufacturers is expected to act as a strong driver towards long-term collaborative relationships. The ability of the relationship to create value in form of profit growth and/or reduced profit variability is fundamental in determining level of commitment of the supply chain partners. Thus retailers were asked to indicate the extent to which factors such as long-term volume commitments, joint use of assets, and reduced variability in profit, are present. The results of their responses are presented in Table 6.23 below.

**Table 6.23** Profit growth/stability

| | Probability | | | | |
|---|---|---|---|---|---|
| | No chance | | | | Certain |
| **Profit growth/stability** | 0% | 25% | 50% | 75% | 100% |
| What is the probability that the relationship with your key manufacturers will result in profit growth or reduced variability in profit? | | | | | |
| **Specific areas:** | | | | | |
| Growth | 0 | 2 | 1 | 2 | 1 |
| Cyclical levelling | 0 | 3 | 1 | 2 | 0 |
| Market share stability | 0 | 0 | 2 | 4 | 0 |
| Sales volume | 0 | 0 | 3 | 3 | 0 |
| Assurance of supply | 0 | 0 | 2 | 4 | 0 |

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As shown in Table 6.23 above, the majority of the retailers indicated that their relationship with manufacturers is expected to result in profit growth or reduced variability in profit. All retailers were optimistic that market share stability, sales volume and assured supply will result from their relationship with key manufacturers. On the question of cyclical levelling of profit, half of the retailers were 50% confident, while the

other half was less optimistic. Lambert *et al*, (1996) argue that the sustainability of these drivers is profound for the long-term survival and profitability of the companies along the supply chain. The long-term survival of the companies in a supply chain is threatened once a competitor replicates the drivers (a competing supply chain).

**(e) Symmetry**

The importance of manufacturers to the success of retailers and vice versa, was examined in terms of relative market share and sales volume, productivity, financial strength, technological sophistication and brand reputation/image, as shown in Table 6.24 below. Where there is symmetry, there is no junior or senior supply chain partner because both parties regard each other as equally important.

**Table 6.24** Symmetry

| | Probability | | | | |
|---|---|---|---|---|---|
| | No chance | | | | Certain |
| **Symmetry** | 0% | 25% | 50% | 75% | 100% |
| What is the probability that your company and your key manufacturers are similar on the following important factors that have potential to affect success of your relationship? | | | | | |
| **Specific areas:** | | | | | |
| Relative size in terms of sales | 0 | 4 | 1 | 0 | 1 |
| Relative market share in their respective industries | 2 | 2 | 1 | 0 | 1 |
| Financial strength | 2 | 1 | 2 | 1 | 0 |
| Productivity | 0 | 3 | 2 | 1 | 0 |
| Brand image/reputation | 2 | 1 | 1 | 2 | 0 |
| Technological sophistication | 0 | 4 | 2 | 0 | 0 |

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Lambert *et al*, (1996) argue that this reduces insecurity, fear and defensiveness in the supply chain relationship, all of which create suspicion between the retailers and manufacturers and lead to reluctance to share information. Most retailers indicated that there is no symmetry (retailers are much larger in size than suppliers) between their companies and manufacturers' in terms of factors that have potential to affect success of their relationship. Specific factors where symmetry was absent were relative size in terms of sales and market share in their respective industries, technological sophistication,

financial strength, productivity, and brand image/reputation. (An area of concern if the optimism expressed elsewhere is to result in real gains in future).

### 6.4.8 Summary of results

The assessment of factors that support the fostering of supply chain relationships between retailers and manufacturers revealed that there is optimism that the relationships will create benefits in form of cost reduction and improved asset utilisation. However, retailers appeared not to be sure about exact sources of these benefits. All the retailers indicated that their relationships with manufacturers result in improved customer service, thus highlighting a strong incentive for the success of these relationships. Also, most retailers were fairly confident that relationships with manufacturers enhance their ability to gain strategic marketing. Another source of success in the relationships between retailers and manufactures is the ability of their relationship to improve profitability.

However, the lack of symmetry between retailers and manufactures (retailers are larger in size than manufacturers) could be a cause for concern if it results in the use of power in the relationships.

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### 6.4.9 Sub-problem 6

*Which performance metrics are used in the supply chains?*

**Manufacturers' performance measures**

Respondents were asked to rank on a scale of 1 to 7, measures that they use to evaluate the performance of their key manufacturers. The measures ranged from order fulfilment to the extent of manufacturers flexibility in achieving unplanned sustainable increase in production. It was also important to focus on measures that reflect the ability of the manufacturers to adapt to changes in the entire supply chain that are caused by changes in the market. The results as summarised in Table 6.25 below show that measures mostly used are delivery performance to request and perfect order fulfilment.

**Table 6.25** Manufacturers' performance measures

| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| **Delivery performance to request**: The percentage of orders fulfilled on or before your request date. | 34 | 80.95 | 2 |
| **Perfect order fulfillment**: The percentage of your orders that are delivered complete, on time, with flawless documentation, and in perfect condition. | 35 | 83.33 | 1 |
| **Upside production flexibility**: The number of days that your manufacturers require to achieve an unplanned sustainable increase in production. | 23 | 54.76 | 4 |
| **Order fulfillment lead-time**: Average lead times consistently achieved by your key manufacturers from the time you authorise an order to the time you receive merchandise. | 26 | 61.90 | 3 |
| **Total supply chain response time**: The time it takes to rebalance the entire supply chain after a change in the market demand has been detected. | 20 | 47.62 | 5 |

Supplier performance measures play an important role in ensuring that manufacturers act according to the expectations of the agreed performance. Thus the measures used may or may not encourage manufacturers to meet the expectations of the supply chain – the satisfaction of the end-use customers. It appears therefore that retailers are mainly concerned with merchandise delivery issues, i.e. the right product being delivered at the right time accompanied with the correct delivery documents. However, the extent to which retailers are flexible in achieving unplanned increase in production and being able to rebalance their operations in line with market changes seem to be of little importance to retailers.

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### 6.5 Summary of results

The measures mostly used to evaluate manufacturers by retailers could be seen as end-use customer focused in the sense that they are meant to encourage manufacturers to supply the right quantity and quality on time, with all the documentation well prepared to avoid delays. Thus the merchandise is made available to end-use customers as and when they expect it. These measures may also help with cost management in the sense that delays are avoided and the right product gets delivered, hence avoiding stock-out costs as

well as sales returns, both which may result in huge cost savings for both retailers and manufacturers. However, it would appear as if the retailers are not concerned about the ability of their manufacturers in adapting to changes in the supply chain that are triggered by changes in the market. This may be an indication of the failure of retailers to take a total supply chain perspective in evaluating their manufacturers. Thus the 'we business' partnership concept seems to be absent in the relationships between retailers and their key manufacturers.

### 6.6 Sub-problem 7

*Which management accounting practices are associated with the supply chains in the South African retail industry?*

**Management accounting practices along the supply chains**

In the context of the supply chain management relationships discussed above, it was also important to establish the management accounting practices used in inter-company processes. This section asked respondents to rank, on a scale of 1 to 7, the management accounting practices used in their relationships with key manufacturers. Table 6.26 below shows that, all retailers indicated a high degree of use of strategic cost management and the use of techniques such as target costing and then the balanced scorecard. Their responses also indicated that total supply chain cost analysis and ABC were not widely used.

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**Table 6.26 Management accounting practices**

| | Individual Scores | Individual scores as a percentage of maximum possible score | Rank |
|---|---|---|---|
| Activity-based costing | 17 | 40.48 | 5 |
| Strategic cost management | 26 | 61.90 | 1 |
| Target costing | 25 | 59.52 | 2 |
| Balanced scorecard | 22 | 52.38 | 3 |
| Total supply chain cost analysis | 20 | 47.62 | 4 |

The high value given to strategic cost management indicates a long-term view of product costs. This is in line with what is expected in a long-term collaborative relationship where cost reduction is not influenced by short-term gains but by the long-term survival of the supply chain. The importance attached to target costing is again consistent with the focus of supply chain management relationships that strive to satisfy customer requirements, given market-determined prices. Thus retailers and their manufacturers have to contain costs within the market-based prices, hence the wide use of strategic cost management, one of whose aims is cost containment.

However, the low value given to ABC and total supply chain cost analysis contradicts the high value attached to strategic cost management. ABC is an approach that effectively supports strategic cost management in the form of accurate cost information related to activities and processes undertaken along the supply chain. This enables supply chain partners to analyse costs along the supply chain – total supply chain costs analysis - in order to have a better understanding of which activities and processes are adding value.

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### 6.7 Summary of results

Strategic cost management followed by target costing are the most common management accounting practices applied between retailers and manufacturers. However, ABC is the least common technique, perhaps indicating that there could be other ways by which cost driver analysis is achieved at the interface between retailers and manufacturers.

## 6.8 ANALYSIS OF SURVEY RESULTS

Uncertain and dynamic business environments characterised by scarce resources, increased competition, higher end-use customers expectations and faster rates of change require suppliers and buyers to turn to partnerships to strengthen supply chain integration in order to create sustainable competitive advantage (Lambert *et al*, 1996). This entails a transformation in which suppliers and buyers are inextricably linked throughout the entire sequence of events that bring raw material from its source through different value-adding activities to the ultimate customer (Spekman *et al*, 1998). The level of risk in these

relationships is determined by transaction uncertainty caused by (1) asset specificity, (2) competition in the supplier markets and (3) willingness of supply chain partners to take risk (Hoyt and Hug, 2000). The management of the risk involves an array of supply chain configurations, ranging from market-based arms-length relationships to trust-based collaborative practices.

When supplier markets are highly competitive and asset specificity is low, buyers can easily engage a supplier and equally easily replace the supplier, depending on whether the supplier has met the buyer expectations or whether the supplier is still required by the buyer (Hoyt and Hug, 2000). In this relationship, there is little or no cooperation, sharing of information and investment into relationship specific assets. The supply chain relationship is at level one, and the main objective of the supply chain partners is the reduction of internal operational costs through pricing, inventory reduction, logistics and freight savings (Poireir, 1998).

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Where there are few suppliers and asset specificity is relatively high, the relationships between suppliers and buyers are more formalised and less flexible (Hoyt and Hug, 2000). However, because of the absence of collaboration, the nature of these relationships inhibits supply chain responsiveness due to the rigidity entrenched in the way companies along the product/service supply chain transact. In other words, the governance mechanisms of these relationships are based on controls – use of restrictive contracts to avoid opportunistic behaviour – instead of trust and collaboration. Thus supply chain partners are still internally focused and their emphasis is on internal functional excellence where cost reduction initiatives are driven by departmental buyers and sellers, not top management – level two supply chains according to Poirier (1998).

Level three and four supply chains involve suppliers and buyers regarding each other as strategic partners (Cullen *at al*, 1999) and the creation of a win-win relationship where each party is seen as equally important in the relationship. Supply chain partners focus on the profitability of the entire supply chain, and their relationship is characterised by trust,

mutual commitment and the sharing of information, and a systematic and dynamic view of the supply chain replaces the traditional adversarial relationships.

In the context of the South African retail industry, the relationships between retailers and their key manufacturers appear to be stable as indicated by respondents who said they could not easily replace their key manufacturers. Information sharing is relatively higher than the information shared by levels one and two supply chain partners. Also retailers have made substantial investments in relationship specific assets. The survey results have shown that, retailers and their key suppliers in both the FMCG and textile sectors have formalised relationships. Also retailers have adapted their order entry and inventory management systems to deal more effectively with their key manufacturers. There is a fairly high level of joint problem solving, information sharing, and mutual trust.

Therefore there is strong evidence of a complete transition from level one to level two, and the exhibition of some of the main characteristics of supply chain levels three and four. For example, retailers indicated that they are confident that their relationships with key manufacturers will continue, hence there is room for the development of more cooperative relationships in future. Also, the presence of trust is demonstrated through relationship-specific investments. This is in line with literature that suggests that expectations of a continued relationship and a willingness to invest by both supply chain partners are positively correlated with the creation of cooperative supply chain structures (Heide and John, 1990). There is optimism that the current relationship between retailers and their manufacturers will yield future benefits in form of cost reduction and improved asset utilisation, improved customer service, enhance gaining marketing advantage, improve profit growth, and reduce profit variability.

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The positive expectations of future benefits in the relationship between retailers and their key manufacturers seems to indicate a growing relationship where retailers and key manufacturers have largely moved from structures that are predominantly vertical (the presence of silos in the supply chains) to horizontal structures that allow them to design, develop, optimise, and manage the internal and external components of the supply chain

in way that is consistent with the overall supply chain objectives. Citing Fine (1999), Hoyt and Hug (2000) state that, the process of transition is cyclical, with a period determined by conditions within each industry. The length of period required to achieve a complete change from integral/vertical to horizontal/modular supply chain forms is dependent on the particular industry's 'clockspeed'. Therefore the pressures that retailers and their key manufacturers in the South African retail industry will continue to face in future will determine the speed with which their current relationships will result in a paradigm shift as they give emphasis to the strategic importance of the entire supply chain.

## 6.9 CONCLUSION

The current business environment in the South African economy is creating pressure on retailers to create collaborative partnerships with their manufacturers. The depleted local supply base in the textile sector and the difficulties of importing merchandise (due to the volatility of the Rand against the US$, quality and reliability issues associated with foreign manufacturers) have created the need for retailers to capture their own local supply base. In the FMCG, the current price increases in all food items, interest rates and transport costs have reduced the buying power of end-use customers. Competitive advantage comes from providing good quality products at affordable prices. This requires streamlining inter-company activities and processes to squeeze out non-value adding activities, thereby reducing costs. In order to achieve this, relationships between retailers and key manufacturers have to be transformed from market-based transactions to trust-based collaborative relationships.

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The supply chain management practices between retailers and key manufacturers in the South African retail industry have largely moved from market-based, arms-length to more collaborative trust-based relationships. The criteria for selecting manufacturers appears to be based on the need to satisfy end-use customers and some of the measures used to evaluate the performance of manufacturers support this objective. The level of information sharing is relatively high, and there is optimism that the relationships will develop to provide future benefits to both parties. Also the investment is relationship-

specific investment appears to indicate the presence of trust between retailers and their key suppliers. However, the significant size difference between retailers (few and large) and manufacturers (many and smaller) could be a cause for concern in the development of these supply chains to be fully-fledged level three and four.

The impact of the supply chain management practices analysed in this chapter will assist in the analysis of the case study results to be presented in chapter seven. The characteristics of the supply chain management in the South African retail industry will be combined by the case study results in chapter seven to inform the analysis that will follow in chapter eight.

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# CHAPTER SEVEN

## CASE STUDY RESULTS

### 7.0 Introduction

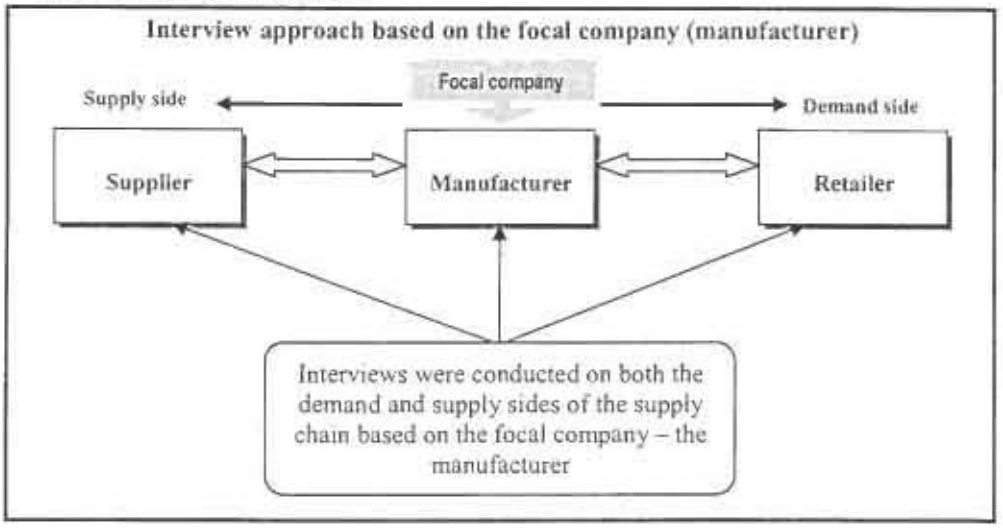
This chapter presents the results of case studies that were conducted in order to establish an in-depth understanding of how strategic cost management is being used to support value creation along supply chains in the South African retail industry. The objective of the case studies was to gather information to be used to answer research sub-questions 8 to 12, as posed at the end of literature review. Therefore, this chapter is *exclusively* descriptive in that, it focuses on the 'story-telling' aspect, i.e. it does not involve the analysis of the results. The analysis of the case study results is the subject of chapter eight.

#### 7.1 Case studies

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Supply chains from two different sectors – the fast-moving consumer goods (FMCG) i.e. food sector (one supply chain) and the textile (clothing) sector (two supply chains) were selected. An in-depth study of how these companies apply cost management techniques and practices along their supply chains in the process of value creation was then carried out. The research adopted a 'snowball' approach (Dewhurst *et al*, 2003) in that each retailer was asked to choose one key merchandise manufacturer for an in-depth analysis. The key manufacturer chosen was in turn asked to choose one of its key suppliers (Tier I Supplier, hereinafter referred to as supplier) that forms part of the supply chain with the retailer, for an in-depth analysis. Thus a total of **nine** companies that constitute three supply chains were subjected to an in-depth study through interviews, personal observations as well as analysis of relevant company documents. The scope of the interviews is depicted in figure 9 below. In order to investigate cost management from both the demand and supply sides of the supply chains, interviews were based on a focal company – the manufacturer – and then extended to one of the key suppliers of the manufacturer as well as a key customer as shown in figure 9 below.

Fig. 9 Scope of interviews




The manufacturer was chosen as the appropriate focal company for interviews because of the nature of the supply chain relationships in the South African retail industry. Due to the power that retailers have in these supply chains relative to the other supply chain participants, it was assumed that manufacturers have to employ a lot of effort in cost management to meet the selling price targets as required by their customers (retailers). It was therefore important to focus on how manufacturers are implementing cost management within their companies, on the supply side (with their suppliers) and on the demand side (with retailers) in order to remain competitive. Also, given the fact that the survey results showed that most retailers make their suppliers (the manufacturers) compete to supply the same type of merchandise based on price, it was felt that most of the cost management effort had to be applied by manufacturers and their suppliers. However, this assumption does not in any way suggest that retailers are not keen to implement cost management. It is based on who along the supply chains feels most of the price pressures in the retail market. Also, if price pressures in the market are not met, suppliers sit with 'commodities', e.g. ingredients, trims and fabric, yet manufacturers sit with complete products, e.g. garments, pies and salads. Therefore, because most of the value-added is done at the manufacturers' part of the supply chain, it was felt that a lot of attention should be given to them, hence they were chosen as the focal companies. The number of respondents interviewed and their positions, the names of the companies

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(pseudo names), and the positions they occupy along the supply chains are given in Table 7.27 below.

**Table 7.27 Summary of details of respondents**

| Company | Sector | Company position along the supply chain[16] | Number of respondents | Position of respondents in their companies | Period in position |
|---|---|---|---|---|---|
| SUP 1 | Textile | Supplier | 1 | Branch Manager | 2 years |
| SUP 2 | Textile | Supplier | 1 | Managing Director | 14 years |
| SUP 3 | Food | Supplier | 1 | Production Manager | 8 years |
| MANU 1 | Textile | Manufacturer | 4 | Purchasing Manager | 9 years |
| | | | | Operations Director | 20 years |
| | | | | Sales Manager | 4 years |
| | | | | Finance Manager | 11 years |
| MANU 2 | Textile | Manufacturer | 4 | Sourcing Director | 5 years |
| | | | | Senior Logistics Manager | 10 years |
| | | | | Senior Production Manager | 7 years |
| | | | | Senior Finance Manager | 22 years |
| MANU 3 | Food | Manufacturer | 3 | Purchasing Director | 6 years |
| | | | | Operations Director | 11 years |
| | | | | Finance Manager | 6 years |
| RET 1 | Textile | Retailer | 3 | Supply Chain Executive | 4 years |
| | | | | Senior Manager | 7 years |
| | | | | Technology Manager | 10 years |
| RET 2 | Textile | Retailer | 1 | Design Manager | 3 years |
| RET 3 | Food | Retailer | 2 | Supply Chain Executive | 4 years |
| | | | | Supply Chain Manager | 4 years |
| **Total** | 9 | | **20** | | |

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Personal interviews with each of the personnel in the above companies lasted on average $1^{1}/_{2}$ hours. The interviews were based on the interview guide that contained structured questions but which gave the respondents room for open answers. The responses of all interviewees were recorded on tape, in addition to notes that were taken as the interviews

[16]The positions of the companies along the supply chains are in relation to the focal company – manufacturer. Thus the suppliers to the manufacturers are regarded as Tier I suppliers and customers of the manufacturers are retailers.

progressed. The transcribed responses from the interviewees form the research's case study databases in appendices **A** to **G**. The databases (appendices) are all coded for ease of reference in the main body of the thesis and also to facilitate accessibility.

More attention was given to the manufacturers along the three supply chains for reasons already stated earlier. Consequently more people were interviewed within all three manufacturers, as compared to suppliers and retailers. Respondents within manufacturers were from the Purchasing, Logistics, Production, Sales and Marketing and Finance functions. However, respondents were not from all five functions in each case, but were made up of members from this group of five functions. Their responses are contained in the databases in appendices **A** to **E** respectively. Appendices **F** and **G** contain responses from suppliers and retailers respectively. Within each appendix, the coding of the interviewee's responses starts with the letter representing that appendix. For example, all responses from people in the Purchasing function are recorded in appendix **A** hence the coding starts with the letter 'A'. All responses from manufacturers have $^{MAN}$ to distinguish them from responses from other supply chain participants, i.e. suppliers (i.e. $^{SUP}$) and retailers (i.e. $^{RET}$). Also, the responses were recorded according to the specific question number that they were meant to answer. Lastly, the manufacturers, suppliers and retailers were arranged as 1, 2 and 3 based on which supply chain they belong to, i.e. supply chain 1, 2 and 3. Therefore the way in which the referencing system works is as follows:

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**Example 1**

**A** $^{MAN\ 1\text{-}1}$ is a reference to:
(1) the Purchasing function (i.e. appendix **A**), (2) manufacturer in supply chain number **1** (i.e. $^{MAN\ 1}$), and (3) a response to question number **1** (i.e.$^{-1}$).

**Example 2**

**G** $^{RET\ 3\text{-}12}$**, item (vi)** is a reference to:
(1) a retailer (appendix **G**), (2) in supply chain number **3**, (3) a response to question number **12**, and (4) the response is specifically for item[17] number six.

[17] Some questions have sub-questions referred to in this thesis as 'items.'

All the tables with summaries of the cost management techniques and practices are referenced to the databases in the manner demonstrated above. Difficulties that may arise from the manner in which the referencing was done are acknowledged. However, it is also important to note that the coding and referencing was done to show the chain of evidence, i.e. making it clear from which sections of the case databases the evidence in the body of the thesis was drawn. The importance of maintaining the integrity of the data used in the thesis was seen as outweighing possible difficulties arising from the coding approach.

## 7.2 PRESENTATION OF RESULTS

In order to facilitate the presentation of the case study results, the chapter is divided into two sections according to the industry sector, i.e. the textile and food sectors. The industry sectors are further divided into the specific supply chains. The results of the supply chains in the textile sector are presented first, (supply chains 1 and 2), followed by the results of the supply chain in the food sector (supply chain 3). Each supply chain section contains a summary of the cost management techniques and practices used by the companies that constitute the specific supply chain (intra- and inter-company cost management techniques and practices) and the value/benefit created. These summaries are based on the responses of interviewees contained in the case databases in Appendices A to G.

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### 7.2.1 Section A: Textile Sector

Section A comprises two supply chains, supply chain 1 and supply chain 2, in the textile sector. The details of each of the supply chains are given in the following sections.

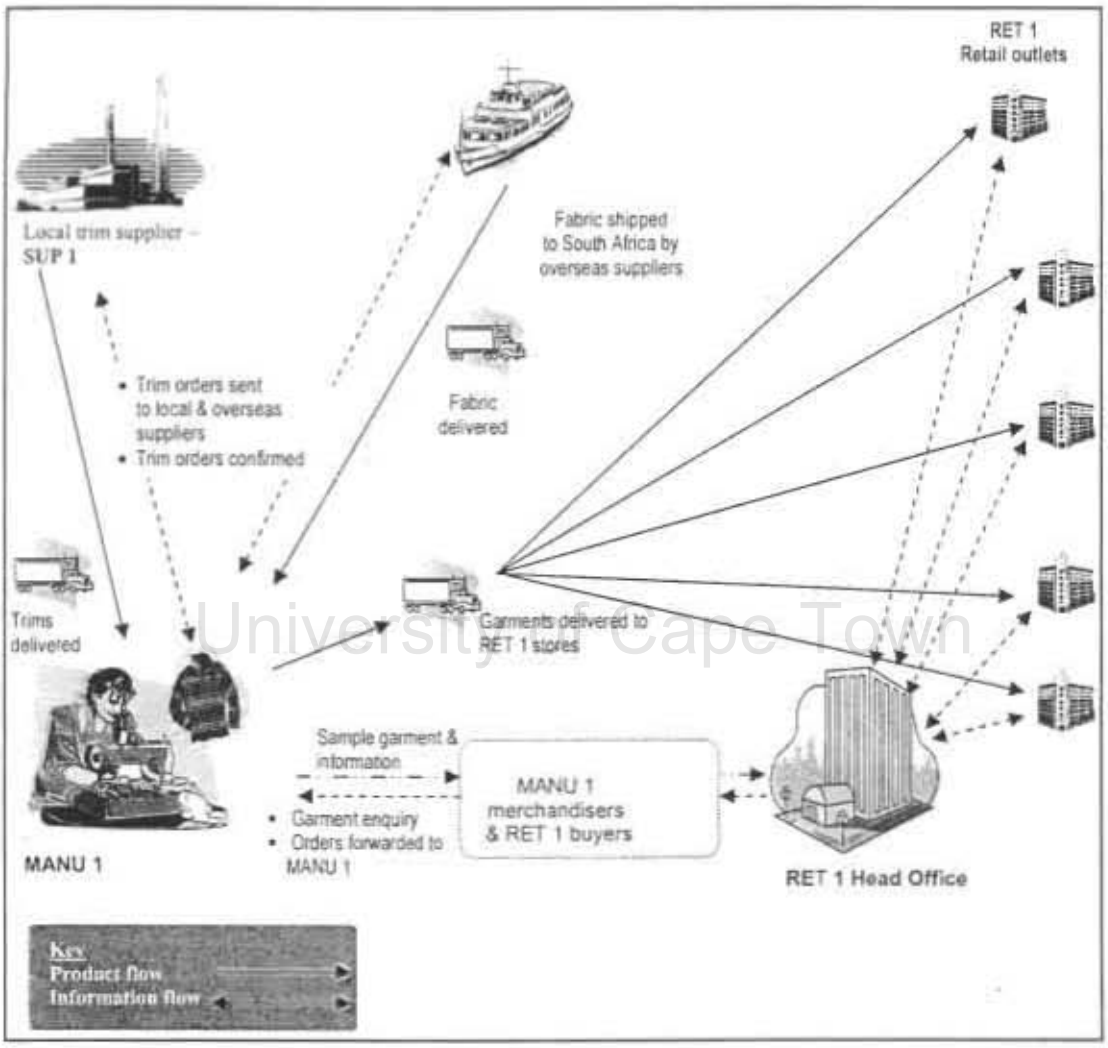
#### Supply Chain 1

### 7.2.2 Background

Supply Chain 1 consists of MANU 1 and SUP 1 (trim supplier) on the supply side and RET 1 on the demand side. Figure 10 below gives a summary of the main activities and

processes undertaken along Supply Chain 1 between MANU 1 and its suppliers on one hand, and its main customer on the other hand.

**Figure 10 SUPPLY CHAIN 1 Configurations**




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RET 1 largely influences the nature of garments and the major activities in this supply chain because all products sold in its stores bear its brand name. Consequently, MANU 1 can only use (both the local and overseas fabric and trim) suppliers who are initially approved by its customer, RET 1. The details of each of the companies along this supply chain are given below.

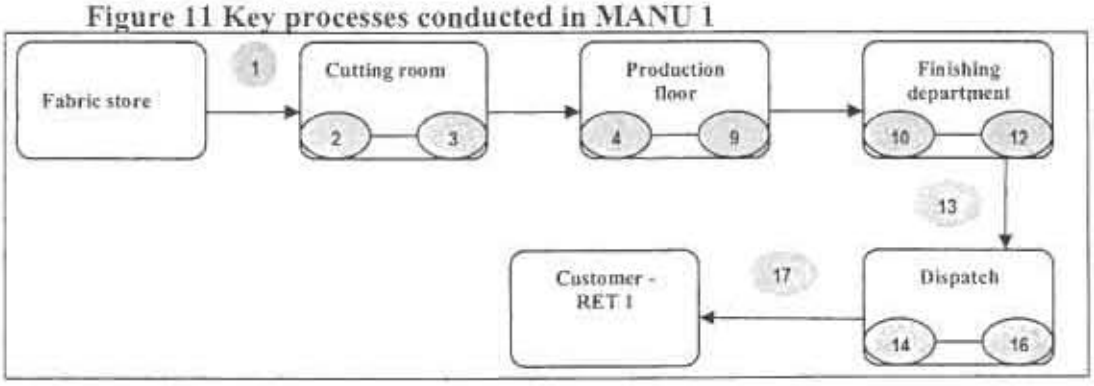
### 7.2.3 Company-specific information

#### MANU 1: Garment manufacturer

MANU 1 was established in the early 1960s and was incorporated into a limited company in 1964. Employing about 80 people, the primary business of the company was the manufacture of children's dresses and ladies slacks. Over the years, the company diversified into ladies dresses, sportswear, blouses, skirts, pre-teen dresses and children's sportswear. Today, the company employs more than 1 250 people and has grown to occupy premises that encompass five buildings with a total area of about 14 500 $m^2$. The growth of the company was due to the fostering of a close relationship with its main customer, RET 1. The growth of RET 1 necessitated the move to new premises in 1977. As RET 1's demand increased, so did MANU 1's growth such that in 1983, it was necessary for the company to build a modern factory. Thus through innovation in design, investment in staff training, keeping abreast of technology and the employment of the right people, the company has managed to grow into a multi-million Rand company that produces some of the top women and children's wear in South Africa. MANU 1 dedicates 90% of its output to RET 1, and exports the remaining output to the UK. The focus of this research is on MANU 1's local market, i.e. its relationship with RET 1. The small fraction of the company's exports is ignored. Figure 11 below shows the major processes conducted in MANU 1's operations.

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**Figure 11 Key processes conducted in MANU 1**




(1) Cutting Room receives fabric from the Fabric Store (2) Fabric cut into the appropriate shapes and sizes according to the specific design of garments (3) Cut goods attached to clips ready to be fed onto the switch track system (4) Cut goods received from the Cutting Room (5) Production lines are set in sequence of

operations determined by the Engineering/Workstudy Departments for effective and efficient assembly of garments (6) Work is fed onto the switch track system (7) Each bundle of production has a programme ticket for the operation. An operator removes the ticket. The ticket is then attached to a gummed sheet, which is then scanned into the computer system. This facilitates the monitoring of efficiency of an operator and also gives a guide as to the quality of work being done by the specific operator (8) One on-line examiner and then one final examiner examine the production procedures on-line before the garments are ironed/pressed. After ironing/pressing of the garments is done, the line auditor does a final examination of the garments (9) The finished garments are put in complete bundles onto the Diablo/conveyor system and proceed to the Finishing Department (10) In the Finishing Department, the necessary swing tickets, stock keeping units (SKUs) and all other necessary finish operations are completed (11) The work is received in the Bagging Section of the Finishing Department where it is scanned (12) The bag-in labels are then attached (13) The garments are sent into the Storage/Despatch area (14) The garments are scanned in, packed into a rail system ready for despatching (15) When delivery instructions are received, the garments are picked from the storage, packed and over-bagged (16) The necessary labelling is done and work is scanned just before loading into delivery vehicles (17) Garments are delivered to the customer[18].

**RET 1**

RET 1 is a division of Cape Holdings, a private listed South African company that does business in the retail industry. RET 1 offers a wide range of high quality clothes and apparel for men and women under its own brand name. The target market for the company is the high-earning consumer category of the South African market. All its suppliers manufacture the company's branded garments, and as such, the company keeps a tight control of quality along the supply chain, from suppliers through to the manufacturers like MANU 1. All suppliers are approved by RET 1 based on quality and other measures before they can do business with MANU 1 and other manufacturers.

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**SUP 1**

SUP 1 is part of a fastening products company that manufactures a wide range of fastening products across six global regions, namely North/Central America, South America, EMEA (Europe, the Middle East and Africa), East Asia, ASAO (South Asian and Oceania) and Japan. SUP 1 Africa produces high quality zippers for garments that MANU 1 makes and supplies to RET 1. The company has a close working relationship

[18] All these processes are based on company documents and the researcher's observations over a period of two days in the company's factory

with MANU 1 and to some extent with RET 1. The extent of its involvement with RET 1 is indirect (via zippers it supplies to MANU 1), and also direct through standard setting for zippers with RET 1 that all suppliers to manufacturers dealing with RET 1 are expected to meet. All SUP 1's inputs come from its sister companies within a large group of companies, as the group is vertically integrated.

### 7.3 Cost management issues

MANU 1's cost management efforts are driven by a number of competitive issues that the company faces. These issues include the cost of inputs and the price that the company can fetch for its garments, quality requirements as specified by its main customer and the level of competition in the industry. The pressure from the intense local competition is worsened by imports from countries in East Asia such as China. Also, due to the fact that the company imports the bulk of its fabric (about 80%), the volatility of the Rand against the US dollar over the last three years translated into higher import costs. Consequently, the company has a cost management focus that is implemented in both its intra-company and inter-company activities and processes.

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#### 7.3.1 Intra-company cost management techniques and practices

The main cost management techniques/tools and practices within MANU 1 are as summarised in Table 7.28 on page 145.

#### 7.3.2 Cost management techniques/tools

The main techniques/tools used for cost management are forward cover, budgetary control supported by variance reports, and benchmarking.

*Forward cover*

Forward cover is used to manage the cost of the company's imports. This tool was very useful during the past three years due to the volatility of the Rand during the period 1999 to 2002. By buying foreign currency forward, the company paid what was the ruling foreign exchange rate on the date of purchase for its future purchases, thus covering itself from cost increases due to the depreciation of the Rand.

**Table 7.28: MANU 1 Intra-company cost management techniques/tools and practices**

**Supply Chain 1**

| Purchasing | Logistics | Production | Sales & Marketing | Finance |
|---|---|---|---|---|
| **Techniques/Tools**<br>• **Budgetary control** (A MAN 1-4, item i)<br><br>**Practices**<br>• **Quality focus** (A MAN 1-7, item i; MAN 1-19, item ii)<br>• **Team-based cost management approach** (A MAN 1-15; ) MAN 1-16, items i, ii & iii) | **Techniques/Tools**<br>• **Budgetary control** (B MAN 1-17)<br><br>**Practices**<br>• **Efficient factory workflow** (B MAN 1-8)<br>• **Effective & efficient space utilisation** (B MAN 1-7, B MAN 1-14, item iii) | **Techniques/Tools**<br>• **Budgetary control** (C MAN 1-17)<br>• **Variance reports** (C MAN 1-26, item iii)<br><br>**Practices**<br>• **Continuous improvement** (C MAN 1-2, C MAN 1-8, item ii)<br>**Quality focus** (C MAN 1-4, item ii)<br>• **Computerised production tracking system** (C MAN 1-2) | **Techniques/Tools**<br>• **Benchmarking** (D MAN 1-20; D MAN 1-29, item ii)<br><br>**Practices**<br>• **Multi-functional teamwork** (D MAN 1-14, items i, ii, iii; D MAN 1-17) | **Techniques/Tools**<br>• **Variance reports** (E MAN 1-4; MAN 1-7, item i; MAN 1-15, item i)<br>• **Budgetary control** (E MAN 1-12)<br>• **Forward cover** (E MAN 1-15, item ii)<br>• **Benchmarking** (E MAN 1-19, item ii)<br><br>**Practices**<br>• **Multi-functional team approach** (E MAN 1-16) |

**Benefits/value created**

**Cost reduction** (A MAN 1-8, items iv, vi; MAN 1-9, item iii; MAN 1-16, item ii; C MAN 1-7, item iii; MAN 1-8, item ii; D MAN 1-9, items ii, iii, iv)

**Operational efficiency** (B MAN 1-7, item ii; MAN 1-14, item i)

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*Budgetary control*

Budgets are used to limit expenditure within acceptable levels, given the company's competitive pressures. This tool is used to manage the cost of inputs as well as the running costs of the company's departments. Variances are prepared monthly to show cost savings or overruns. For example, the Purchasing department would be evaluated on its ability to get a good price for inputs (without sacrificing the quality of fabric and trims).

*Benchmarking*

Benchmarking is used to assess how the company is performing in comparison to its competitors from an on-time delivery of garments point of view. Benchmarking is also used to compare the cost of garments supplied by MANU 1 to competitors. The objective is to stay within the price range that will enable the company to compete favourably, given the intense competition especially from overseas manufacturers.

### 7.3.3 Cost management practices

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In addition to the above techniques, the company's internal cost management is supported by a number of practices such as a strong quality focus, efficient factory workflow (supported by effective and efficient space utilisation), a team-based cost management approach, and continuous improvement supported by time study.

*Efficient factory layout*

Efficient factory layout is aimed at reducing/eliminating bottlenecks which impact negatively on the ability of the company to deliver garments to the customer on time. On the factory floor, for example, Machine Operators are arranged in a sequential order, based on the sequence of operations required to make a garment. Efficient factory layout is also supported by the effective utilisation of the space in the factory, resulting in a better return per square metre.

*Quality focus*

The company's quality focus[19] aims at ensuring that its inputs and outputs are of high quality standards. Between 20% and 30% of its fabric is inspected in the Fabric Store, depending on (a) the nature of the fabric (some fabrics are more prone to faults than others) and (b) the supplier (some suppliers are more reliable than others as far as quality is concerned). The total length and width of the fabric are checked against the invoice details and the fabric is then tested for (i) strength and (ii) colour (shades). An inspection summary sheet is produced by the Fabric Store Supervisor, detailing the nature of the faults found on the garment. If the fabric faults are significant, the fabric is rejected and sold to small companies that can use it. The supplier of the fabric is notified and the price paid for the fabric adjusted accordingly. Where the faults are minor, the fabric is accepted and used for making garments. The inspection summary sheet is then sent to the Cutting Room so as to assist the Cutting Room personnel in laying out the fabric in such a way that the impact of fabric faults on the garment quality is minimised. Quality inspection is also done after the fabric has been cut to check for shrinkage and other material distortions. This is done to prevent defectively cut fabric from being sent to the production lines. In addition to processes that are specified in terms of quality standards, there is also a quality-awareness program that is supported by huge and strategically placed notices in the factory floor, such as: "DO IT RIGHT FIRST TIME."

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Once the cutting of the fabric is done, sorting[20] of the different pieces that form a garment is done. A strict monitoring of the shades of the fabric is adhered to in order to avoid mixing different shades. If different fabric shades are mistakenly mixed, that means the wrong shades are combined into a single garment, thus causing rejects. Also the quality of every piece that forms a garment is checked for consistency in size, style, distortions and nips (nips indicate how the different pieces of the garments are to be joined).

[19] The entire section on the quality focus is largely based on the researcher's personal observations and discussions with the relevant people during two whole days of factory visits.

[20] In addition to interviews, this process is also based on personal observations made by the researcher over two days of factory visits.

*Team-based approach*

MANU 1 also uses a strong team-based approach to cost management that is supported by team-based performance measures. For example, each line of Machine Operators is evaluated based on their collective performance as shown on a Style Balancing Summary sheet. A bonus is given to all Machinists along a production line that achieves cost savings through higher efficiency (efficiency is expressed as time saved)[21]. (For other examples of the team-based approach, see A $^{\text{MAN 1-16}}$, items i, ii, iii; E $^{\text{MAN 1-16}}$, items i, ii).

*Continuous improvement*

There is also a focus on continuous improvement that is supported by what is called the Time Study department. This department's task is to undertake some form of time and motion studies on all the operations that are required to make garments. The objective of these studies is to incorporate improvements in the efficiency of Machinists into the standard time per operation. Thus the time allowable per operation is gradually reduced over time based on the experience of the Machinists, resulting in cost savings.

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*Benefits/value created*

The benefits created through the application of intra-company management techniques and practices are shown in form of operating efficiencies that result in cost reductions. All these internal cost management techniques and practices are applied in conjunction with inter-company cost management techniques and practices.

### 7.3.4 Inter-company cost management techniques and practices

MANU 1's inter-company cost management techniques and practices are applied on both its supply side with SUP 1 and demand side with RET 1.

### 7.3.5 Demand side

RET 1 has a strong influence on the activities and processes at the interface between the two companies because MANU 1 produces RET 1's branded garments. This influence is

[21] Documentary evidence of the group-based performance evaluation was made available to the researcher.

seen in the cost management techniques and practices that characterise the relationship between the two companies.

### 7.3.6 Cost management techniques/tools

The main cost management techniques used between the two companies are target costing and returns to manufacturer (RTMs) analysis.

*Target costing*

Target costing is used by RET 1 to manage the cost of garments it buys from MANU 1. RET 1 gives MANU 1 cost targets based on the garment's tiers, i.e. entry level, the mid-point (core garment), and top of the range garments. The target selling prices for these garment tiers and RET 1's desired margins are communicated to MANU 1 and the difference between the target selling prices and the margins represent MANU 1's target selling prices.

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Where MANU 1 cannot meet the target cost of a garment, i.e. sell the garment at the customer's required target cost and make a profit that is in line with its own goals, several alternatives are explored. One such alternative is to initiate price negotiations with fabric and trim suppliers to reduce input costs. Cost reduction can also be achieved by reengineering the garment in two ways:

(1) The garment style/construction is changed in a way that will not affect its look. An example of garment reengineering would be the removal of a seam such as a top notch that is regarded as not adding value.

(2) The processes required to make the garment are changed in such a way as to simplify them. For instance, instead of performing two operations, only one operation is performed. An example of process re-engineering would be that, instead of performing (a) an overlock and then (b) turning the garment to lockstitch it (two processes), a double-turn hem (one operation) is performed. This involves a machine that automatically folds the hem of the garment and lockstitches it. Thus the second process is cost-effective with regard to labour cost, i.e. less time is spent on certain processes involved in making a garment style.

When both companies are happy with the garment style as well as its cost, then RET 1 gives MANU 1 the go ahead to manufacture the style for its stores.

*RTM analysis*

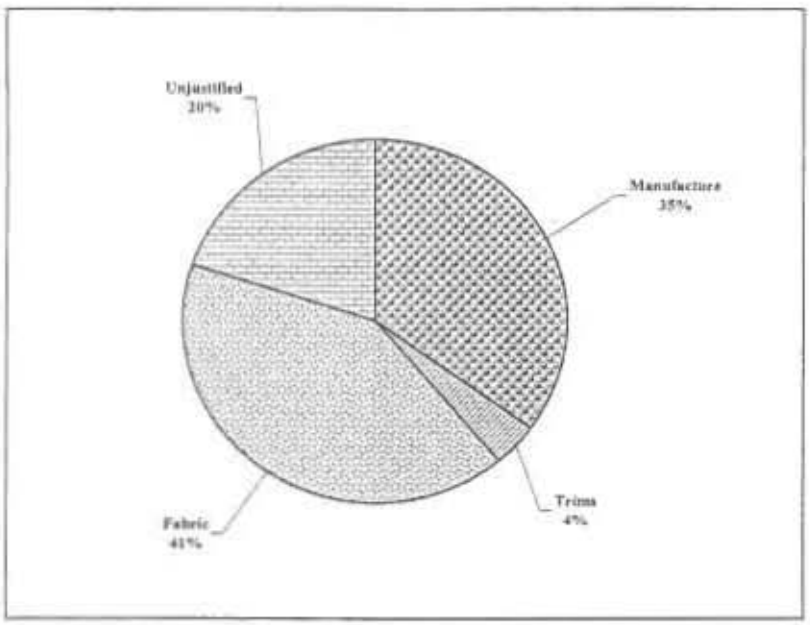
Returns to manufacturer (RTMs) are returns from RET 1 to MANU 1 for various reasons. Garments can be returned due to trims and fabric faults due to faults in, or the way in which the garments have been manufactured. In all these cases the RTMs are said to be 'justified', i.e. it is the manufacturer's fault that the garments are returned. Sometimes returns occur as a result of the way end-use customers handle garments in RET 1's stores. In this case the RTMs are said to be 'unjustified' in that it is not the manufacturer's fault but a result of end-use customer abuse. Both companies analyse RTMs to determine their source(s) as a way of getting to the root cause and taking corrective action. There is thus a partnership between MANU 1 and RET 1 in dealing with RTMs. The point of generation of the RTM information is RET 1's point of sale system that captures RTMs in stores and then remits the information to what is called the RTM warehouse. The RTM warehouse system interfaces with the Finance department which then analyses the RTMs according to supplier and then garment type. The information generated is used for two main reasons:

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(1) To make adjustments to the amount owing to supplier for payment purposes.
(2) For quality control in the case of justified RTMs, by identifying the sources of the problems and taking corrective action with the relevant supplier.

RET 1's Finance department sends the information generated from the analysis of RTMs to the company's technologists, who would then take up the issue with the relevant supplier in all justified RTM cases. In terms of the relationship with MANU 1, RET 1's technologists communicate all RTMs cases during weekly and monthly meetings between the two companies. MANU 1 produces its own monthly analyses to get insights into the trends emerging from the RTMs data. Pie charts and histograms are produced to show not only the source of the problems, but also their magnitude. The analysis goes further and breaks down the RTMs into departmental percentages and garment units, while also identifying the relationship between justified and unjustified returns. The diagrams below show examples of charts that relate to one month of RTM analysis.

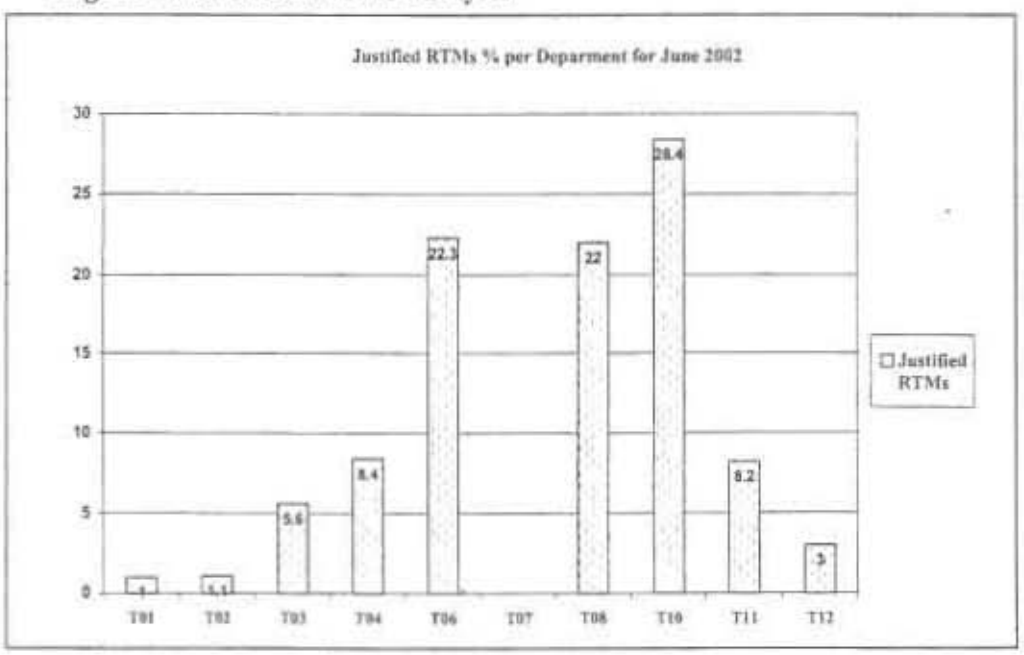
**Figure 12 RTMs analysis for June 2002**




The RTMs are then broken down into departmental returns (T01 to T12 are codes that represent departments from which the garments originated) in order to trace exactly the source of the quality problems, as shown in the figure 13 below.

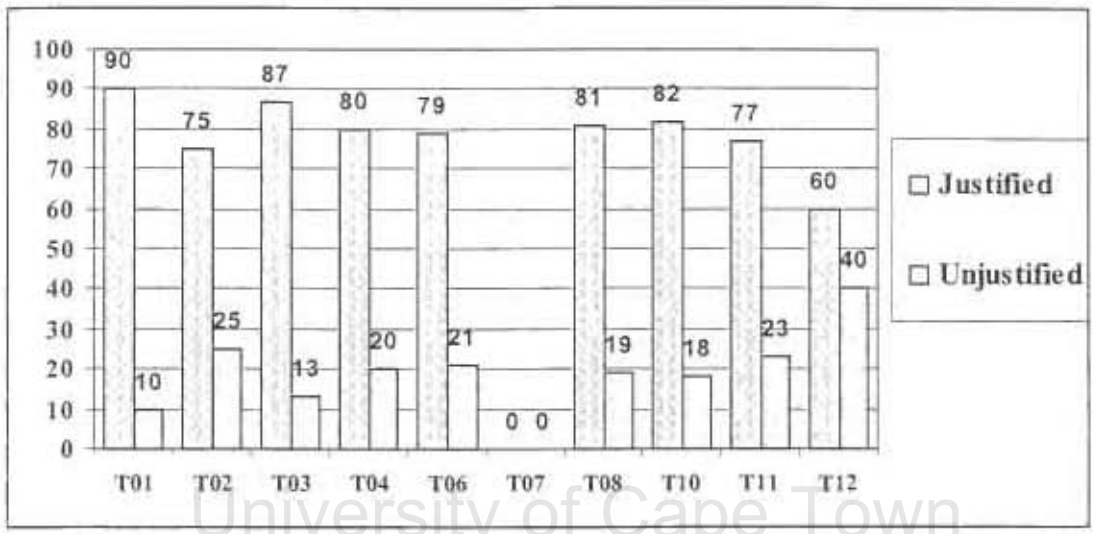
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**Figure 13 Justified RTMs analysis**



A further analysis examines at the percentage of justified versus unjustified returns for each department in the same month, as shown in the figure 14 below. The purpose of this breakdown is see how MANU 1 is performing, i.e. by comparing returns due to problems emanating from its own operations with those arising from end-use customers.

**Figure 14 Percentage of justified versus unjustified RTMs**




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All the unjustified RTMs are the responsibility of RET 1, and the company donates the affected garments to charity. However, the information showing unjustified RTMs is also valuable from a cost management point of view in that the company investigates ways of avoiding such losses (waste). There is therefore an agreement between MANU 1 and RET 1 that all unjustified RTMs are not returned to MANU 1. Any unjustified RTMs which are mistakenly returned to MANU 1 are thus sent back to RET 1.

### 7.3.7 Cost management practices

The main practices used for cost management at the interface between MANU 1 and RET 1 include the use of electronic data interchange (EDI), customer-approved suppliers, joint product design, product delivery scheduling, strategy meetings (including regular communication through production meetings) and the identification and sharing of cost savings.

*Electronic data interchange (EDI)*

Electronic Data Interchange (EDI) is used to make the interface between RET 1 and MANU 1 as efficient as possible. The system was developed by RET 1 and is used only with its key suppliers. Orders are placed and confirmed electronically. This means that both companies get accurate and timely information from each other. Communication between the two companies is also on a personal level by way of weekly meetings. Issues surrounding delivery schedules, changes in plans and problems encountered are discussed at these meetings.

*Customer-approved suppliers*

On quality issues, RET 1 determines the suppliers with which MANU 1 can do business. The determination is based on measures which evaluate the quality of the inputs that the suppliers can supply. Other criteria for selection involve ethical issues such as compliance with environmental laws as well as labour laws. Thus all prospective suppliers must submit their products to RET 1 for quality tests (fabric texture, strength and colour) and must disclose their compliance ethical standards such as environmental laws as well as fair labour practices. Quality testing is outsourced to a third party who evaluates products on the basis of RET 1's specifications. Once a supplier satisfies the standards set by RET 1, its name is added to a list of approved customers from which MANU 1 can select. In this way, quality standards which satisfy RET 1's requirements are maintained throughout the supply chain.

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*Delivery scheduling (using PERT)*

A strict product delivery schedule is adhered to in order to meet the in-store date for garments ordered by RET 1. As such, MANU 1 follows a critical path agreed to by RET 1 and which is closely monitored and reviewed during weekly meetings. The critical path analysis spells out exactly when MANU 1 should source fabric and trims, ship the inputs, produce a garment sample, have a garment-showing workshop with RET 1, book for garment production, produce the ordered garments, and dispatch the finished garments to the customer. The objective of following the critical path is to ensure that garments are in RET 1's stores as planned to avoid stock-out costs. Also, following the critical path

allows MANU 1 to produce the garment without rushing in order to maintain quality. In the event that MANU 1 fails to deliver on time, the garments are air-freighted to the customer's stores at MANU 1's own cost, (which is considerable). Late deliveries could mean that RET 1 may miss the peak selling period, resulting in huge markdowns. In addition, late deliveries may be returned to MANU 1 in the event that MANU 1 did not adhere to the agreed delivery dates. These returned garments are sold at reduced prices to other interested parties, resulting in losses on MANU 1's part.

*Joint product design*

MANU 1 and RET 1 jointly design garments to ensure that they meet the specifications required by RET 1. The objective of this form of interaction is to eliminate the costs of RTMs associated with design faults in garments delivered to RET 1, as well as the opportunity and other costs associated with the production of design-faulty garments. Thus RET 1's Design Centre works closely with MANU 1's designers to come up with cost-effective designs that will meet the target costs as set by RET 1. The RET 1 team comprises designers, technologists and buyers and the MANU 1 team is made up of designers and merchandisers. Knowledge sharing for the purpose of coming up with cost-effective designs characterizes the discussions between the two teams. Joint product design is meant to support target costing in that both companies work on a design that will be cost effective and priced competitively.

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*Strategy meetings*

Strategy meetings are held once every six months between RET 1 and MANU 1, during which RET 1 spells out the direction in which its business is heading, and the role which MANU 1 will play. These meetings enable MANU 1 to plan accordingly, e.g. when to invest in equipment and training, which machines to buy and how many. The company's planning is therefore geared towards playing a role that is in line with the strategy of RET 1. Consequently, investment decisions are done wisely, i.e. the purchase of relevant machines and embarking on training that equips machine operators in its factory with the desired skills. Also, by having a clear picture of what is required by its customer, MANU

1 can make fabric and trim arrangements with the relevant suppliers based on the results of the strategy meeting deliberations.

Strategy meetings are complimented by weekly and monthly meetings during which short-term targets that support the strategic goals are evaluated. These meetings deal with delivery issues, progress with the production of garments required by RET 1 and problems that are encountered on both MANU 1's and RET 1's sides.

*Management of input cost*

The input costs of garment supplied by MANU 1 to RET 1 are not managed only by way of quality control. For instance, RET 1 shares its duty credit with MANU 1 as a way of reducing the costs of inputs used by MANU 1. When RET 1 exports to overseas markets, the Department of Trade and Industry credits the company with duty rebates that it can utilize to offset its cost of imported inputs. When RET 1 has not fully utilized its duty rebates, the credit is transferred for use to reduce MANU 1's input costs (duty on imported fabric). This way, the cost of fabric is significantly reduced, resulting in competitively priced garments. In addition to the use of duty rebates, the sharing of shipping costs on imports between the two companies also positively impacts on cost reduction through lower landed fabric costs (see G $^{RET\ 1\text{-}5}$, (e) item iii for more information).

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*Sharing of cost savings*

The sharing of cost savings between MANU 1 and RET 1 complements all the other cost management approaches already discussed. Cost savings achieved between the two companies are shared through margins, i.e. it is a win-win situation where each company achieves a better margin as a result of their joint cost management efforts between them.

*Benefits/value created*

The benefits of cost management efforts between MANU 1 and RET 1 are represented by cost reductions, increased profitability, mutual growth and the development of trust

between the two companies. These benefits are discussed in the weekly and monthly meetings as well as during the strategy meetings held between RET 1 and MANU 1.

Tables 7.29 and 7.30 on pages 158 and 159 respectively, summarise the main techniques and practices that MANU 1 and RET 1, respectively, utilise in the process of managing costs at their interface. The information relating to the inter-company cost management practices are on the right and left of Tables 7.29 and 7.30 respectively.

### 7.3.8 RET 1's Intra-company cost management

RET 1's inter-company cost management with MANU 1 is also complemented by internal cost management that involves the use of techniques such as budgetary control (supported by management reports and target costing), the balanced scorecard (BSC) and practices such as quality focus and a team-based approach.

*Budgetary control*

Budgetary control is used to contain the cost of garments purchased from suppliers as well as for the running of departments, within the company. A Rand value purchases budget is set, derived from the budgeted sales for the company. The objective is to buy as many garments as possible with the budgeted funds. In order to support this cost containment tool, cost targets are set for the supplier (as discussed earlier) so as to maximise the number of units purchased with the budgeted funds. Monthly management reports are prepared by the Finance department to show progress towards the attainment of goals as set in the budget. Thus variances in the monthly management reports indicate how Buyers are performing relative to the margins set in the budget. The purpose of cost targets in the budget is to ensure that margins are protected, i.e. supplier inflation is managed. Budgetary control is also used to contain the costs of running the departments within the company. Departmental running costs are constrained within the set budgets.

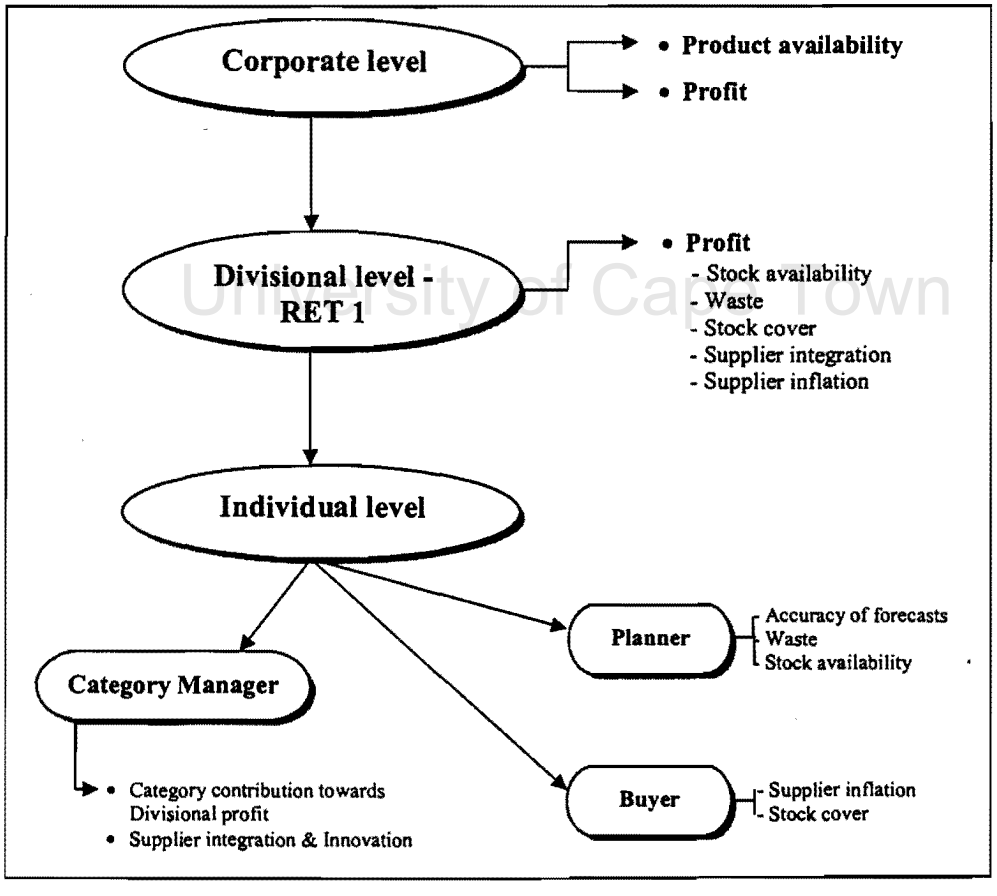
*Balanced scorecard*

The balanced scorecard (BSC) in RET 1 is part of the BSC implemented throughout the African Retailers Group. Thus it starts with the corporate BSC, which then filters down to

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business unit level (divisional level) and finally to individual level. Figure 15 below shows how the BSC is implemented within the African Retailers Group and the specific issues relating to RET 1. The BSC is integrated in that individual measures support divisional measures and the divisional measures in turn support corporate measures. The measures used at the individual level are more focused and detailed, based on what an individual can influence. The divisional measures are broader than individual measures and for RET 1 the main measure used is profit, supported by measures such as stock availability, waste, stock cover, supplier integration and supplier inflation.

**Figure 15 RET 1 Balanced scorecard framework**




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**Table 7.29 MANU 1: Summary of inter-company cost management and the benefits/value created**

| | Supply Side (with SUP 1) | | Demand Side (with RET 1) | |
|---|---|---|---|---|
| Supply Chain 1 | **Techniques/Tools**<br>• **Computerised order tracking** (A MAN 1-19, item iii)<br><br>**Practices**<br>• **Price negotiation** (A MAN 1-8, item iv; C MAN 1-20, item i; E MAN 1-20, item i)<br>• **Quality control** (A MAN 1-8, item vi; E MAN 1-20, item ii)<br>• **Synchronisation of input delivery with production** (A MAN 1-8, item ii; MAN 1-19, item i; E MAN 1-20, item iii)<br>• **Communication and joint problem solving** (A MAN 1-8, item iii)<br>• **Training and assistance** (A MAN 1-21, item iv; C MAN 1-20, items ii, iii) | **Benefits/Value Created**<br>• **Development of trust** (A MAN 1-21, items i, ii)<br>• **Increased profitability** (A MAN 1-21, item iii; C MAN 1-22, item i; E MAN 1-22, item i)<br>• **Cost reduction** (A MAN 1-21, item v)<br>• **Improved productivity** (C MAN 1-22, item ii) | **Techniques/Tools**<br>• **Target costing** (C MAN 1-23, item iv; MAN 1-26, item ii; D MAN 1-9, items i, ii, iii; MAN 1-29, item i; E MAN 1-26, item i)<br>• **RTM Analysis** (C MAN 1-26, items i (a), (b), (c), (d), ii)<br><br>**Practices**<br>• **Customer-approved suppliers** (A MAN 1-22, item i; E MAN 1-23, item ii)<br>• **Joint product design** (C MAN 1-23, item ii)<br>• **Product delivery scheduling** (C MAN 1-23, item iii; D MAN 1-5, item ii; MAN 1-21, item i) E MAN 1-23, item iii)<br>• **Strategy meetings** (D MAN 1-21, item ii (a), (b), (c), (d), (e); MAN 1-23, item iv)<br>**Sharing of cost savings** (D MAN 1-24)<br>• **Use of EDI** (D MAN 1-21, item iv) | **Benefits/Value Created**<br>• **Cost reduction** (A MAN 1-24, items i, ii; C MAN 1-24, item i; D MAN 1-23, item i; E MAN 1-25, item i)<br>• **Increased profitability** (A MAN 1-24, item i; C MAN 1-24, item i; E MAN 1-25, item ii)<br>• **Development of trust** (C MAN 1-24, item iii)<br>• **Company growth** (C MAN 1-24, item ii) |

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**Table 7.30 RET 1: Summary of inter-company cost management and the benefits/value created**

| | Supply Side (with MANU 1) | | Supply Side (with SUP 1) | |
|---|---|---|---|---|
| **Supply Chain 1** | **Techniques/Tools**<br>• **Target costing** (G RET 1-5, (a) items i to vi)<br><br>**Practices**<br>• **Training and assistance** (G RET 1-5, (b) items i, ii)<br>• **Delivery scheduling** (G RET 1-5, (c) items i, ii)<br>• **Joint product design** (G RET 1-5, (d) items i, ii)<br>• **Sharing of duty credit** (G RET 1-5, (e) item i)<br>• **Strategy meetings** (G RET 1-5, (e) item ii)<br>• **Sharing of shipping costs** (G RET 1-5, (e) item iii)<br>• **Sharing of cost savings through margins** (G RET 1-6) | **Benefits/Value Created**<br>• **Improved profitability** (G RET 1-11, item i)<br>• **Cost savings** (G RET 1-11, item iii) | **Techniques/Tools**<br><br>**Practices**<br>• **Quality focus** (G RET 1-17)<br>• **Meetings** (G RET 1-18, items i, ii, iii) | **Benefits/Value Created**<br>• **Cost savings** (G RET 1-19, items i, iii) |

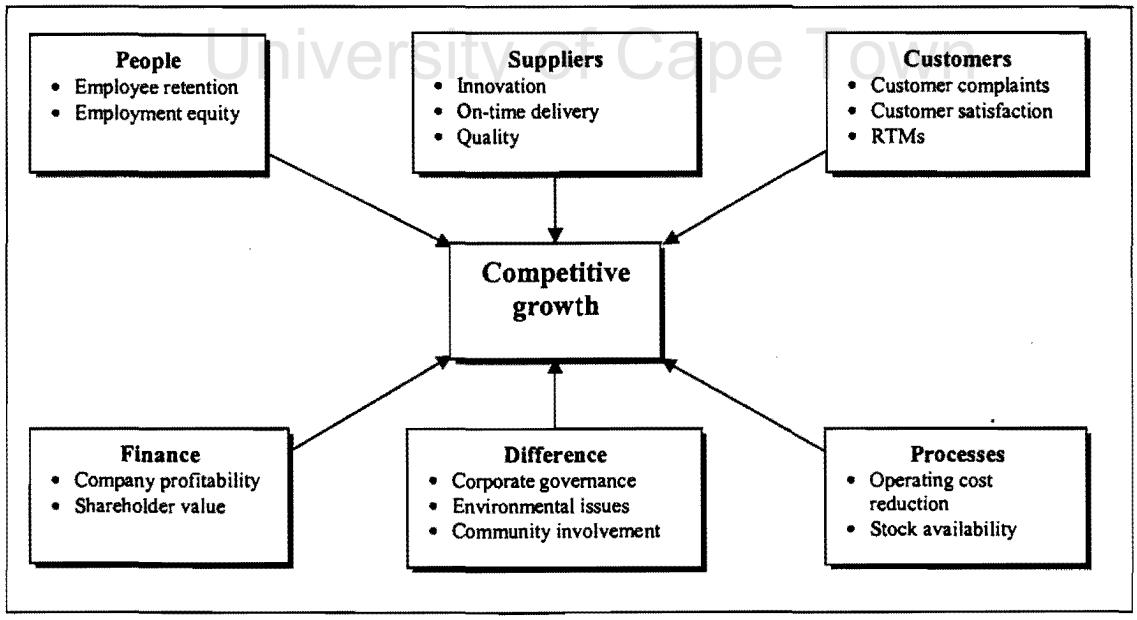
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The BSC model was developed around the Kaplan and Norton (1992) model, but the key issues that are measured are specific to the needs of WW and its divisions. Key issues in the model are people, finance, customers, suppliers, internal processes and a unique measure called "difference", as shown in figure 16 below. The manner in which supply chain cost management is achieved through the use of BSC model, is by way of the measures used at individual and divisional level.

*(i) Customer perspective*

Customer complaints and RTMs are analysed to get to the root cause thereof. As discussed earlier, RTMs are used to facilitate inter-company cost management between RET 1 and MANU 1. They are also utilised internally through the analysis of unjustified RTMs with the objective of reducing the level of waste or even eliminating losses completely.

**Figure 16 RET 1 Balanced scorecard measures**




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As stated earlier, all unjustified RTMs are costs that are absorbed by RET 1, hence their elimination or reduction results in cost reduction. Also, the RTMs whose costs are borne by MANU 1 (and other suppliers, i.e. justified RTMs) are an indication that end-use customers are not getting what they want in terms of quality, thus the measure is

important from a business point of view, i.e. reputation in the market place and hence continued business with end-use customers may be affected by poor quality garments.

*(ii) Supplier perspective*

The supplier perspective looks at the quality problems as indicated by the number of RTMs that are justified. This measure is therefore used in conjunction with the customer measure because the information relating to RTMs comes from end-use customers. In addition to quality issues, RET 1 looks at supplier innovation in terms of new products that fit into the RET 1 culture. The company wants suppliers to take more responsibility for coming up with new product designs that support RET 1's strategic thrust. Each category manager in RET 1 is evaluated using this measure, i.e. the category manager is expected to work with suppliers in such a way that more and more product designs originate from the suppliers of garments in that category. On-time delivery is also a measure that supports cost reduction in that garments are supposed to be in stores as and when they have been planned for. Failure to deliver garments on time entails lost sales, hence the garment planners are expected to ensure that stock is carefully planned for the company's stores in a way that avoids stock-outs costs.

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*(iii) Internal processes perspective*

This perspective deals with the streamlining and improvement of internal processes of RET 1 as regards stock management, reconciliations with suppliers, IT support and purchase orders in order to achieve efficiency and obtain more meaningful information[22]. The objectives that have been set at corporate level are intended to simplify the processes as a means of cost reduction. For example, the company changed its stock management from what is called the **Retail Method of Accounting** to the **Cost Method of**

[22] At corporate level a decision was also made to implement activity-based costing (ABC) in all the company's divisions, including RET 1. According to WW's Supply Chain Executive, the objective of this tool is to understand what is driving costs along the company's divisional supply chains. The focus is on making better decisions rather than accurate cost assignment to stock keeping units (SKUs). Thus ABC will assist the divisions to understand the cost of a given supply chain component. As the WW executive put it: "Once we understand what is driving costs, then we do not go beyond that. For example, if costs are arising at the truckload level, there is no point in analysing costs at the tray level, i.e. there is not point in analysing costs at the SKU level. You may get the number but that does not necessarily improve your decision." The ABC model is expected to be in place by the end of June, 2003.

**Accounting**. The Retail Method of Accounting is the management of garment stock along the supply chain at retail selling price. The value of the garments is accounted for at the selling price, i.e. cost of the garments, plus transport costs up to the stores plus the company's margin. The Cost Method of Accounting does not take margin into account until the garments have been sold in stores. Thus the management of stock is done at cost, i.e. the value of stock is the invoice price plus transport up to the stores. The advantage of the Cost Method of Accounting is that the company has a better tool to manage its margins in that it has more information to establish whether the company is making a profit or not. In other words, by the time the stock gets to the stores, the company can tell whether, given its target selling price, the difference between the value of the stock (invoice price plus transport) and its selling price, result in a profit. This way there is cost transparency, especially with regard to the cost of transport and other supply chain activities between MANU 1 and its stores. Cost reduction efforts can then be applied to those parts of its supply chain which generate the most costs.

*(iv) Finance perspective*

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In line with the streamlining of internal process, the company's aim at corporate level is to utilise an approach called '20-10-5.'The objective is to create 20% shareholder value from 10% sales growth (in value) and only a 5% increase in operating costs. The focus is *not* to increase the company's sales budget unless that transforms into an improved bottom line. Increasing the sales at the same rate as an increase in costs will not benefit the company. Thus there is a strong link between the finance perspective and the other perspectives already discussed, and particularly the internal process perspective, i.e. the objective to keep operating costs (through efficient processes) as low as possible so that an increase in sales will result in an even better increase in the company's profits.

*(v) Difference perspective*

This perspective is meant to create uniqueness across the entire African Retailers Group by focusing on issues like environmental concerns, community involvement and corporate governance. As such, the divisions within the company have to ensure that their involvement in these issues is visible. One of the ways in which this perspective affects

RET 1's supply chain with its suppliers, including MANU 1 and SUP 1, is in terms of ethical standards. All suppliers are approved by RET 1 and placed on a list of approved suppliers before they can do business with manufacturers like MANU 1. Apart from quality issues, suppliers are also evaluated on ethical issues such as the nature of materials that they use, fair labour practices within their companies and environmental compliance. Every year, these issues are evaluated to make sure that all suppliers and manufacturers continue to comply. RET 1's intra-company cost management techniques and practices are summarised in Table 7.31 on page 164 below.

### 7.3.9 Supply side

The supply side of Supply Chain 1 is largely influenced by the activities of the demand side of the supply chain. MANU 1 works with its suppliers to ensure that RET 1's orders are delivered on time, at the right price and quality.

## 7.4 Cost Management techniques/tools

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*Computerised order tracking*

In the relationship between MANU 1 and SUP 1, the only tool that is used on the supply side involves computerized order tracking. The purpose of this tool is to inform MANU 1 of the location of its orders (for example, zippers in SUP 1's production system) within the supplier's production system. Thus MANU 1 can plan with some degree of certainty when to book the production of garments that use SUP 1 zippers because of the accurate information that comes from SUP 1. Cost reduction is therefore achieved by avoiding delays in the production of garments in MANU 1's factories.

### 7.4.1 Cost management practices

The cost management efforts on the supply side are supported by several practices, namely price negotiation, quality control, training and assistance, use of customer-approved suppliers and synchronization of input delivery with production.

**Table 7.31 RET 1: Summary of intra-company cost management and the benefits/value created**

| | RET 1 | |
|---|---|---|
| **Supply Chain 1** | **Techniques/Tools** | **Benefits/Value Created** |
| | • **Budgetary control** ($G^{RET\ 1\text{-}16}$, item i, ii)<br>• **Balanced scorecard** ($G^{RET\ 1\text{-}16}$, item i, iii)<br>• **Target costing** ($G^{RET\ 1\text{-}5}$, (a) items iii, iv, v, vi)<br><br>**Practices**<br>• **Quality focus** ($G^{RET\ 1\text{-}12}$, item $i_{(a)}$)<br>• **Team-based approach** ($G^{RET\ 1\text{-}15}$)<br>• **Management reports** ($G^{RET\ 1\text{-}14}$) | • **Cost reduction** ($G^{RET\ 1\text{-}12}$, items ii, iii) |

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*Price negotiation*

Price negotiation with key suppliers is a widely used practice that is aimed at managing the cost of direct inputs (fabric and trims). Once inputs have been purchased, there is very little room for reducing costs attached to their price. Therefore price negotiation is used to reduce the cost of garments that MANU 1 makes by negotiating favourable trim prices with SUP 1 (and fabric suppliers), given the fact that input costs constitute a significant amount of the cost of a garment.

*Input quality control*

Quality control focuses on reducing costs caused by defective garments due to the use of poor quality fabric and trims. Thus MANU 1 emphasizes buying inputs from suppliers that constitute high quality fabric and trims. The quality focus is supported by the company's internal quality control testing of inputs before they are used (as discussed under intra-company cost management). The use of suppliers who have been approved (in terms of quality and other measures) by the company's customer strengthens the quality focus. SUP 1 produces high quality zippers because it is part of a global company that has stringent quality control measures that are enforced through total quality management. As a result, SUP 1's zippers are used by RET 1 as a standard that other zippers suppliers should meet if they are to be listed as approved suppliers.

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*Other*

Communication, joint problem-solving and training and assistance are practices that are aimed at identifying cost reduction opportunities between MANU 1 and its suppliers. MANU 1's suppliers offer training and assistance for the use of equipment they sell to the company, as well as cost-effective ways of utilising fabric they supply (see examples in A $^{\text{MAN 1-21}}$, item iv and C $^{\text{MAN 1-20}}$, items ii, iii). The purpose of synchronising input delivery and production is to reduce/eliminate the cost of idle time across the production lines. Delays in the delivery of inputs for the manufacture of garments entail costs in the form of idle time in the factory. Thus MANU 1 and SUP 1 work closely to make sure that inputs are delivered as and when required. Cost reductions achieved between the two companies are shared through margins (see F $^{\text{SUP 1-6}}$).

The main cost management techniques and practices that are implemented between MANU 1 and SUP 1 are summarised in Tables 7.29 and 7.32. Cost management techniques and practices between MANU 1 and SUP 1, from MANU 1's perspective are on the left-hand side of Table 7.29 on page 158. From SUP 1's perspective they are in Table 7.32 on page 167 below, on the right-hand side.

*Benefits/value created*

Supply side inter-company cost management produces benefits such as increased profitability (resulting from cost savings), improved productivity and the development of trust between MANU 1 and TKK.

### 7.4.2 SUP 1 Intra-cost management

SUP 1 applies cost management within its operations by the use of budgetary control supported by monthly management reports, total quality management, benchmarking and a top-down cost management approach as summarized in Table 7.33 on page 167 below.

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*Budgetary control*

Budgets are use to manage the cost of running departments. They are reviewed monthly through management reports.

*Total quality management*

Since SUP 1 is a company that operates world-wide, total quality management (TQM) is a key issue in maintaining standards throughout the global market.

*Benchmarking*

Benchmarking is used to compare the cost of the zippers that the company sells and its competitors' prices. The competitors' prices are used to set cost targets within the company in order to remain competitive.

**Table 7.32 SUP 1: Summary of inter-company cost management and the benefits/value created**

| | Supply Side (with key Suppliers) | | Demand Side (with Manufacturer - MANU 1) | |
|---|---|---|---|---|
| | Techniques/Tools | Benefits/Value Created | Techniques/Tools | Benefits/Value Created |
| Supply Chain 1 | • Transfer pricing ($F^{SUP\ 1-16}$, item ii)<br>• Budgetary control ($F^{SUP\ 1-15}$, item i)<br>Practices<br>• Quarterly inter-divisional strategy meetings ($F^{SUP\ 1-17}$, item ii) | • Better customer service ($F^{SUP\ 1-18}$)<br>• Increased sales ($F^{SUP\ 1-18}$) | Practices<br>• Training & assistance ($F^{SUP\ 1-5}$, (b) )<br>• Product delivery scheduling ($F^{SUP\ 1-5}$, (c) )<br>• Sharing of cost savings through margins ($F^{SUP\ 1-6}$) | • Cost reduction ($F^{SUP\ 1-8}$)<br>• More business – increased profitability ($F^{SUP\ 1-6}$) |

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**Table 7.33 SUP 1: Summary of intra-company cost management and the benefits/value created**

| | Techniques/Tools | |
|---|---|---|
| Supply Chain 1 | • Budgetary control ($F^{SUP\ 1-15}$, item i)<br>• TQM ($F^{SUP\ 1-15}$, item ii)<br>• Benchmarking ($F^{SUP\ 1-15}$, item iii)<br>• Monthly management reports/variance reports ($F^{SUP\ 1-13}$) | • Cost reduction ($F^{SUP\ 1-11}$, item iv)<br>• Increased profitability ($F^{SUP\ 1-11}$, item vi) |

*Benefits/value created*

SUP 1 achieves cost reductions, resulting in increased profitability, from the application of cost management within its operations.

### 7.4.3 Conclusion

The main techniques/tools that are used for cost management in Supply Chain 1 are target costing, budgetary control, variance analysis, balanced scorecard, RTMs analysis, benchmarking and forward cover. The practices that are common are price negotiation, intra-company teams, inter-company teams, sharing of cost savings, quality focus, training and assistance, delivery scheduling, use of EDI, continuous improvement and joint problem-solving, as shown in Table 7.34 below.

**Table 7.34: Supply Chain 1 Classification of cost management techniques & practices**

| | Traditional management accounting | Advanced management accounting | Other |
|---|---|---|---|
| **Technique/tool** | Budgetary control<br>Variance analysis | Continuous improvement (Kaizen)<br>Balanced scorecard<br>Benchmarking<br>Target costing | EDI<br>RTMs analysis |
| **Practice** | | | Price negotiation<br>Delivery scheduling<br>Training & assistance<br>Joint problem-solving<br>Quality focus<br>Intra-company teams<br>Inter-company teams<br>Forward cover<br>Sharing of cost savings |

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These techniques and practices are applied within the companies and between the companies' processes. The value that is generated by cost management techniques and practices along Supply Chain 1 is seen as cost reduction, the development of trust, increased profitability and the growth of the companies involved. Table 34 above

summarises the cost management techniques and practices commonly used in Supply Chain 1 according to whether they belong under the banner of traditional, advanced management accounting or neither. The practices in the 'other' category, as shall be discussed in chapter eight, are applied to support strategic cost management.

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## Supply Chain 2

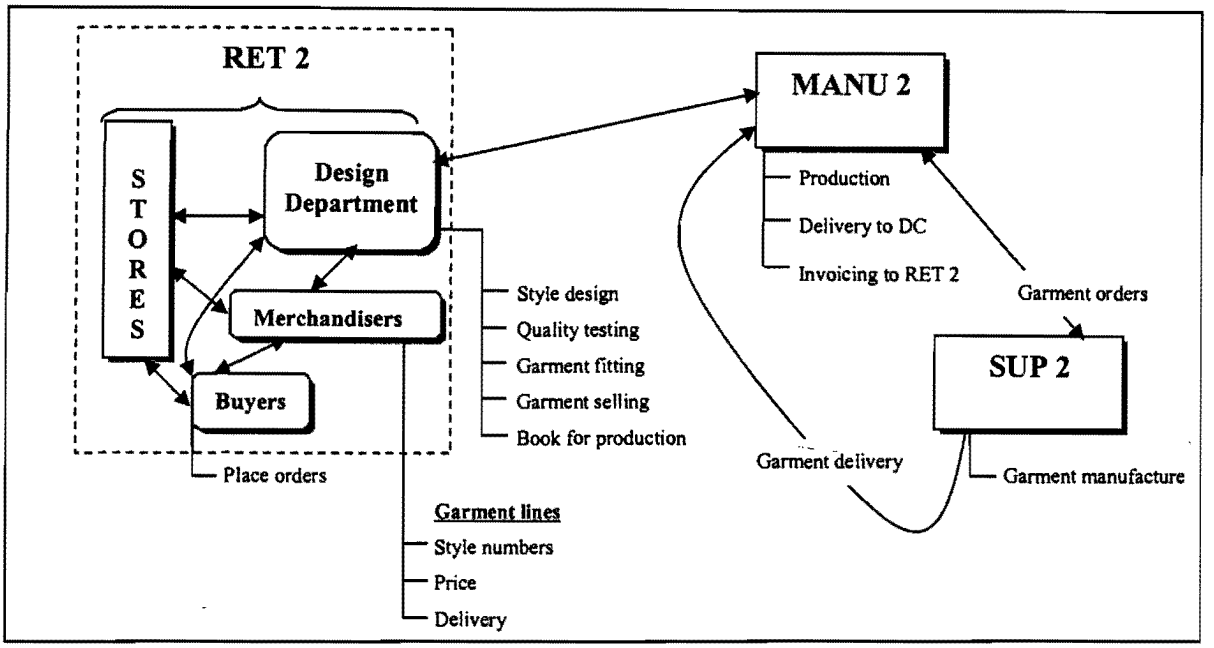
### 7.5.0 Background

Supply Chain 2 is composed of MANU 2, an apparel design and supply company, SUP 2, a cut-make-and-trim (CMT) – garment manufacturer and RET 2. The structure of Supply Chain 2 is unique, in that MANU 2 is part of the RET 2 group of companies and is responsible for the design of garments and the outsourcing of their manufacture. It supplies garments to its sister companies on the retail end of the supply chain, hence its transactions with its customers involve transfer pricing. Also, MANU 2 does not perform the actual manufacture of the garments. Its joint focus is on research into current overseas trends (with RET 2) and the manufacture of sample garments.

Once the garment design is approved by RET 2, the actual manufacture of the required number of garments is outsourced to companies such as SUP 2, that specialise in garment manufacture – the CMTs. MANU 2's key fabric suppliers are in China, and for practical reasons it was not feasible to include one of them in this research. The supplier that forms part of this research is one of MANU 2's key garment manufacturers namely SUP 2. The relationship between the companies in Supply Chain 2 is shown in figure 17 on page 171. RET 2's merchandisers are responsible for garment lines in terms of styles and the size distribution in each style selection. Garment orders placed by RET 2 buyers are based of styles chosen for the particular season, called 'bought' styles. In addition, the RET 2 group has a design department which is responsible for producing original garment styles. The design department was originally part of MANU 2, but three years ago the RET 2 group decided to restructure MANU 2 by placing the design department under the wing of its retail division, (RET 2). This was done for a strategic reason – to allow the design department to work close to the market and thereby provide on a quick response to the needs of the market. Thus the company is able to gather information from the stores and quickly translate it into garment designs.

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**Figure 17 Supply Chain 2 Configurations**



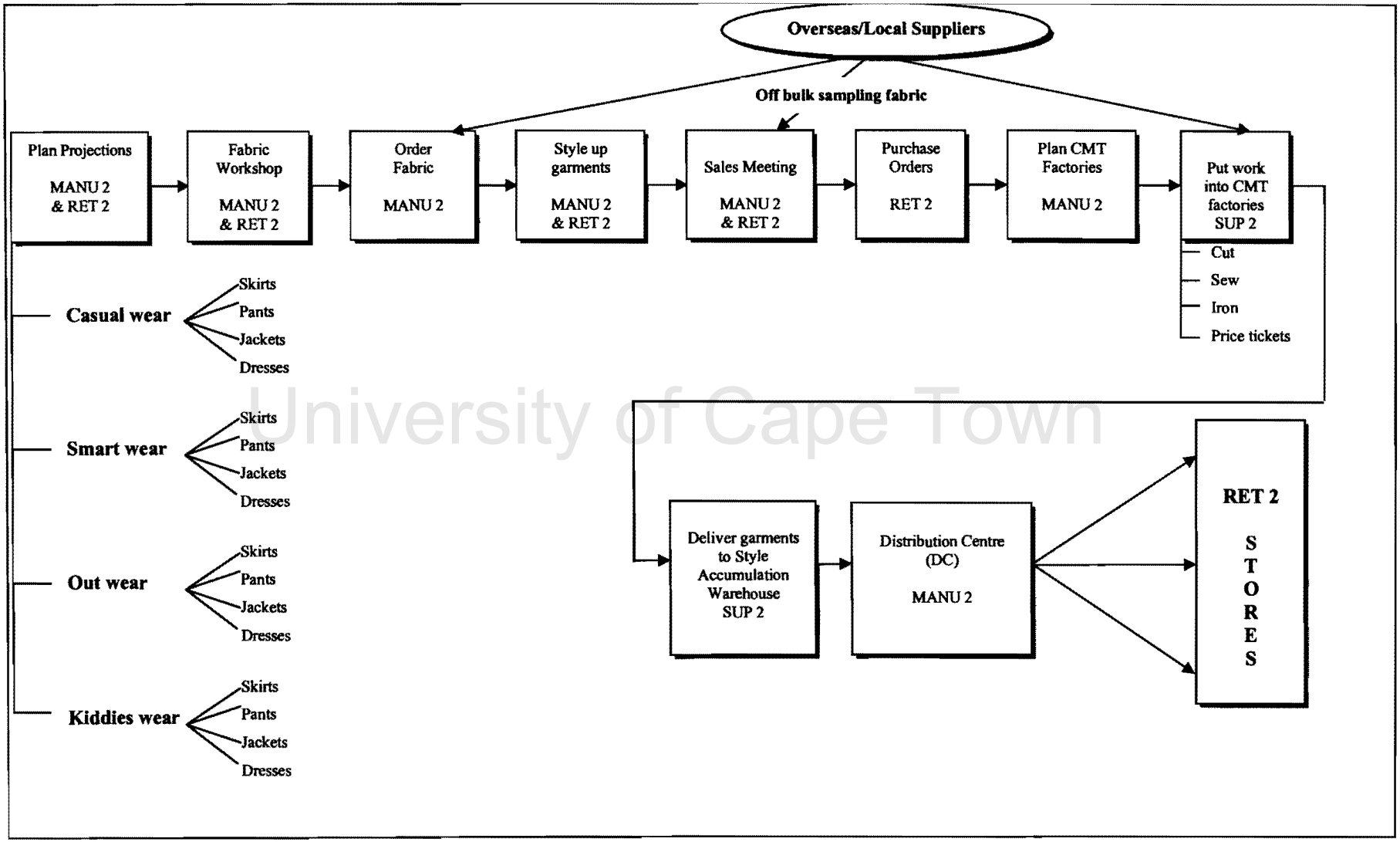

The design department has a number of responsibilities, i.e. 'selling' the garment concept to the RET 2 merchandisers, holding garment fitting workshops, booking the production of 'bought' styles with MANU 2 and quality testing of all garments produced by SUP 2. MANU 2 is responsible for the 'production' side of the business. The company knows which of the CMTs are best qualified (in terms of experience and machinery) to make the style required by RET 2. MANU 2 is also responsible for buying fabric and trims, in addition to outsourcing the manufacture of the garments. The manufactured garments are then transferred to RET 2 at cost, i.e. at fabric, trims and CMT labour cost. SUP 2 is a labour broker in that its main function is to manufacture the garments as required by MANU 2. Thus MANU 2 supplies SUP 2 with all the necessary fabric and most of the trims. Key processes within Supply Chain 2 are shown in figure 18 below.

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### 7.5.1 MANU 2 Intra-company cost management

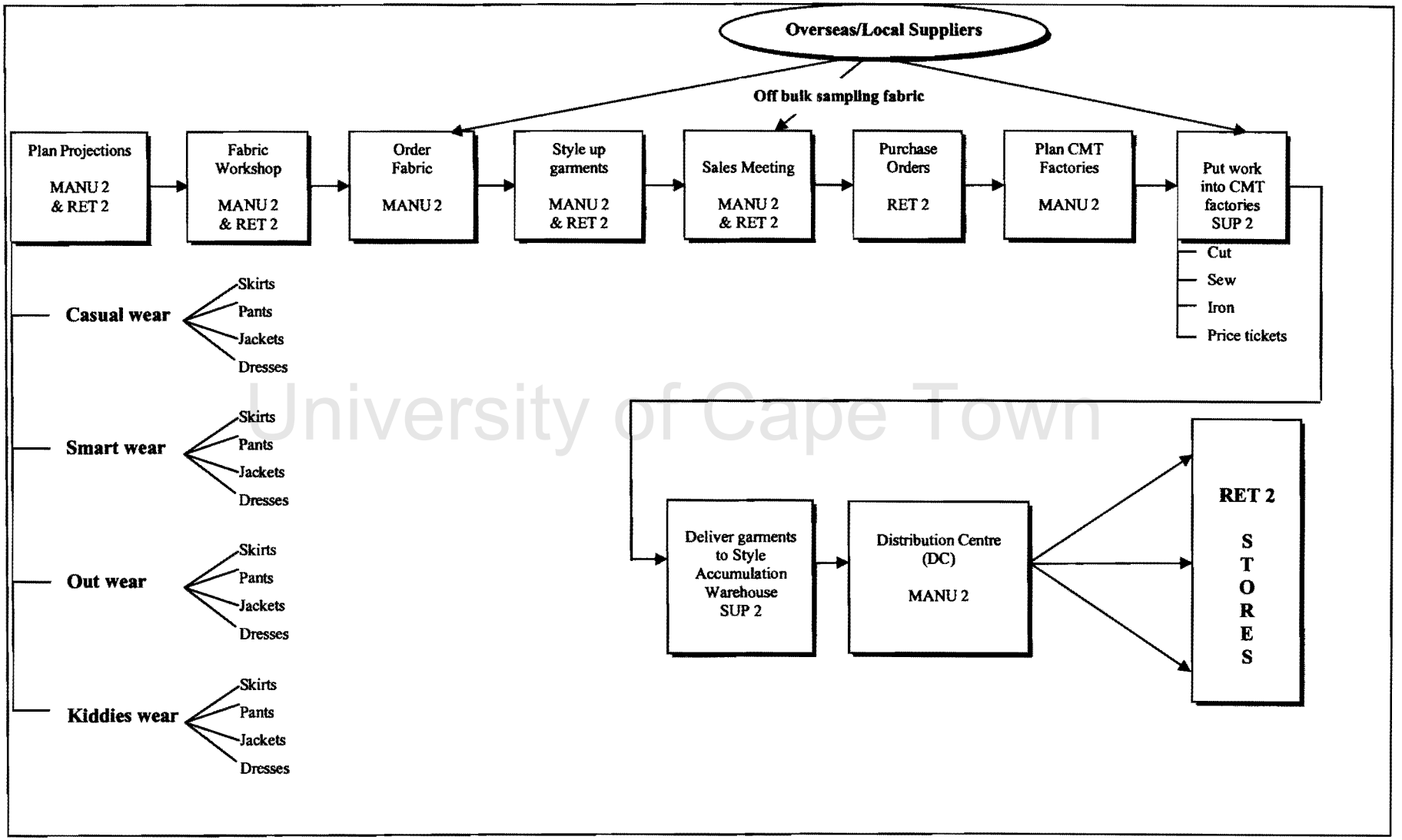
Managing costs within MANU 2 is achieved by the use of tools such as budgetary control (supported by variance analysis) and forward cover. Practices such as continuous improvement supported by work study, employee training, on-time delivery of inputs, quality control and a team-based approach are also employed in this regard.

**Figure 18 Key Processes in Supply Chain 2**




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**Figure 18 Key Processes in Supply Chain 2**




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These cost management techniques and practices are applied within the context of the main processes that the company undergoes in sourcing inputs (fabric and trims), outsourcing the labour input and delivering the garments to its customer, as shown in the diagram below. Table 7.35 on page 174 provides a summary of the cost management techniques and practices applied by MANU 2 in its internal operations.

### 7.5.2 Cost management techniques/tools

Budgetary control is the main tool used for managing the costs of inputs and for controlling expenses in the company's departments. The company also utilises forward cover to manage the cost of imported inputs such as fabric, and applies target costing in the production function.

*Budgetary control*

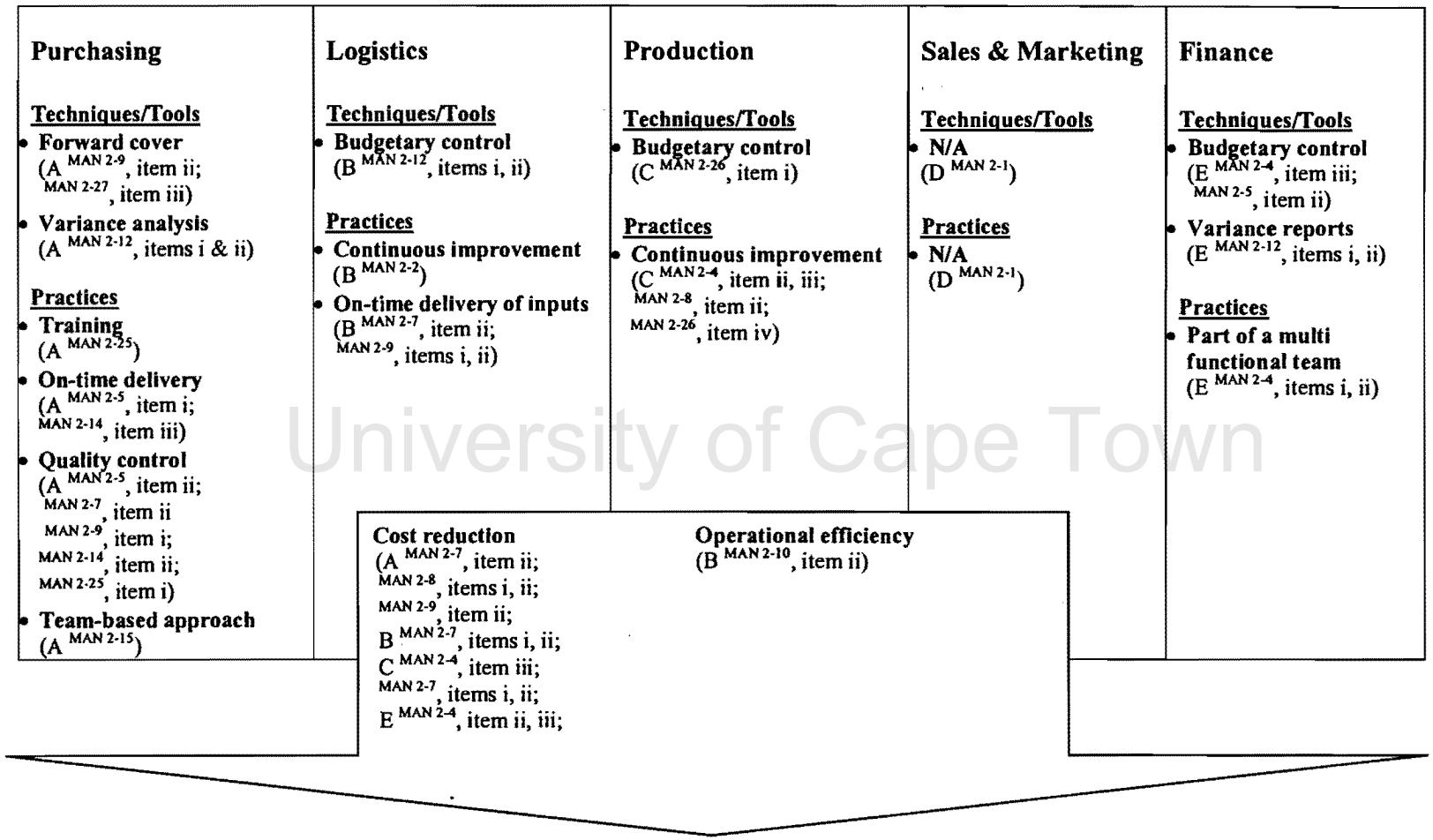
Budgetary control is used mainly to manage the costs of running the departments within the company. The Purchasing and Production budgets do, however, have budgetary constraints in terms of how much they may spend on material inputs and labour, respectively. The budgetary control system is supported by the preparation of monthly variance reports by the Finance department so as to compare the budgeted cost target to the actual expenditure. This way, departments can identify adverse spending variances and can take corrective action.

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*Forward cover*

Forward cover is a tool used to manage the increasing costs of imports arising from the volatility of the Rand against the US dollar. This tool is used by the MANU 2 Purchasing department to buy foreign currency in advance at the rate applicable on the foreign currency purchase date and then use this currency to purchase the company's future imports. This tool has proven particularly useful during the period 1999 to 2002 due to the significant depreciation of the Rand against the US dollar.

**Table 7.35 MANU 2: Summary of intra-company cost management and the benefits/value created**




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### 7.5.3 Cost management practices

The cost management practices that MANU 2 applies within its operations include employee training, on-time delivery of inputs, continuous improvement, quality control and a team-based approach to cost reduction.

*Employee training*

MANU 2 employee skills' training is aimed at improving the manner in which tasks are performed, i.e. imparting and enhancing cost-effective ways of performing tasks. In the purchasing department, for instance, new employees undergo a training program for between one and two years, during which time they are exposed to the core MANU 2 business. Skills in purchasing are particularly important for MANU 2, because of the high percentage of total garment cost constituted by fabric and trim costs.

*On-time delivery of inputs*

MANU 2's purchasing and logistics departments work closely with production to ensure that input delivery is made timeously so as to satisfy production needs. The role of purchasing is to place orders on time, while logistics ensures that inputs are delivered as close to the production schedule as possible. Consequently cost savings are achieved in two ways:

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(1) fabric and trims are delivered on time, thus eliminating downtime costs on the production lines
(2) MANU 2 does not need to carry a huge buffer stock of fabric and trims, which results in lower carrying costs, e.g. by reducing the opportunity cost of capital tied up in stock, as well as storage and insurance costs.

*Continuous improvement*

Continuous improvement involves the analysis of time and motion studies carried out in the CMT factories, with the objective of improving efficiency. This task is performed by the workstudy section within MANU 2's production department. The workstudy section maintains a database of the standard times required for each garment-making operation that has been performed in the past. These times are gradually reduced, based on factory

personnel experience and training. Also, whenever the information is available, standards are benchmarked against competitors' times for similar operations. Consequently, the labour cost component of all garments is continuously reviewed with the aim of ongoing cost reduction.

*Quality control*

Quality control is implemented from the time that fabric and trims are purchased. One of the key responsibilities of the purchasing department is to buy high quality fabric and trims. Once the inputs have been delivered, MANU 2's quality control department, headed by a Quality Control Executive, conducts laboratory tests on the fabric and trims. Attributes such as dimensional stability to washing (a test of shrinkage to wash on both length and width of the fabric, expressed as a percentage), stability to free steam (a test of shrinkage to steam of the fabric on both length and width expressed as a percentage), spirality (a test of to what extent knitted garments twist after wash, expressed as a percentage), colour fastening to washing (change and stain), colour fastening to water at 37 degrees Celsius and colour fastening to dry rub (a test of the extent to which fabric rubs off against other fabric), are tested.

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A laboratory test report is then produced which spells out whether the fabric or trim has passed or failed the tests. The inputs that pass the test are then used for the production of garments. The quality control department also provides after-care instructions, advising end-use customers on the treatment of finished garments. (Providing the content of all garment 'care labels' on clothes, e.g. do not bleach, wash separately etc.).

The focus of quality control initiatives within MANU 2 is on preventive measures, as a means of reducing or eliminating quality problems caused by poor quality fabric and trims. In this way, the company also reduces the number of returns from its customer, RET 2, which arise from end-use customer returns.

*Team-based approach*

Cost management is a team effort at MANU 2 in that all departments within the company co-operate to find a cost-effective solution to garment styles. As the Sourcing Director put it:

> "..... cost management within our company is a team effort, from the clerk to the Managing Director. There is an understanding and knowledge of the importance of cost management." (A $^{MAN\ 2\text{-}15}$, item ii).

The negotiations with key suppliers of fabric and trims prices, as well as labour cost negotiations with CMTs involve all the departments, i.e. purchasing, production, designing, logistics and finance. Teamwork is used to assess the impact of garment styles on the cost of production in terms of fabric, trims and labour costs. The company's Senior Finance Manager explained how teamwork is implemented as follows:

> "We work as a team with production, designing, purchasing and logistics personnel from the beginning of the production process when the production department negotiates prices of garments. We look at the impact of a garment's style on cost via the labour and material requirements." (E $^{MAN\ 2\text{-}4}$, items i, ii).

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Thus teamwork is used to share ideas and experiences and to find ways of reducing costs associated with a garment style. In other words, teamwork creates synergistic benefits (such as cost reduction opportunities) that each department, working independently, would probably not accomplish.

*Benefits/value created*

The intra-company cost management techniques and practices applied by MANU 2 result in cost reductions and operational efficiency. Cost reduction is achieved in fabric and trims cost, labour cost, and the running of departments within the company. Operational efficiency is achieved via the constant re-engineering of the logistics function, so as to facilitate the efficient movement of inputs.

### 7.5.4 Inter-company cost management

MANU 2's inter-company cost management involves working with its customer (sister company), RET 2 on the demand side and a total of eight CMTs on the supply side, of which SUP 2 is one.

### 7.5.5 Demand side

Cost management techniques and practices applied between MANU 2 and RET 2 include target costing, benchmarking, transfer pricing, joint product design, inter-company multi-functional teams, delivery scheduling, quality focus, collaborative stock planning, open book policy, and training and assistance. Tables 36 and 37 on pages 179 and 180 respectively summarise the cost management techniques and practices applied at the interface between MANU 2 and RET 2.

### 7.5.6 Inter-company cost management techniques

*Transfer pricing*

Since MANU 2 and RET 2 belong to the same group of companies, they use transfer pricing systems to price the garments which MANU 2 supplies to RET 2. It the group's policy that RET 2 is not compelled to purchase garments from MANU 2. In addition, all the garments that MANU 2 supplies to its sister company, RET 2, are 'sold' at cost, i.e. they are transferred at the cost of fabric, trims and labour. Thus MANU 2 is a cost centre, whose performance is evaluated in terms of its ability to supply garments that are competitively priced. Currently, RET 2 purchases about 40% of its garment needs from MANU 2.

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Transfer pricing is applied in conjunction with benchmarking. Both companies send merchandisers overseas to examine fashion trends. The merchandisers identify garments which, in their opinion will appeal to the South African market and take note of their prices. In addition, MANU 2 benchmarks its garments' costs against competitor's prices i.e. other manufacturers' prices). MANU 2 ensures that its transfer prices to RET 2 do no exceed its competitors' prices, so as not to lose business. Also, at a group level, the ability of MANU 2 to reduce costs is seen in the profitability of the garment lines supplied to RET 2.

**Table 7.36 MANU 2: Summary of inter-company cost management and benefits/value created**

| | Supply Side (with SUP 2) | | Demand Side (with RET 2) | |
|---|---|---|---|---|
| **Supply Chain 2** | **Techniques/Tools**<br>• **Target costing** (C MAN 2-26, item ii)<br><br>**Practices**<br>• **Price negotiation** C MAN 2-4, item i; MAN 2-8, item iii E MAN 2-7, item ii)<br>• **Quality control** C MAN 2-26, item iii)<br>• **Economies of scale/Bulk orders** C MAN 2-8, item iv; MAN 2-14, item ii; MAN 2-20, item i; E MAN 2-8, item i)<br>• **Continuous improvement/Learning Curve/ Work Study** (C MAN 2-4, item ii; MAN 2-14, item iii; MAN 2-26, item iv; E MAN 2-8, item ii)<br>• **Inter-company teams/Joint product development** (C MAN 2-8, item v; MAN 2-21, item iii)<br>• **Financial assistance** (E MAN 2-20) | **Benefits/Value Created**<br>• **Cost reduction** (A MAN 2-21, item ii; C MAN 2-22, item i)<br>• **Trust-based long term relationship** (A MAN 2-21, item i)<br>• **More business** (B MAN 2-23, items i (a), (b); C MAN 2-22, item ii; E MAN 2-22, item ii) | **Techniques/Tools**<br>• **Target costing** (C MAN 2-27, items ii (a), (b))<br>• **Benchmarking** (E MAN 2-23, item iii)<br><br>**Practices**<br>• **Collaborative stock planning** (B MAN 2-24, item i)<br>• **Inter-company multi-functional teams** (A MAN 2-16, item ii; MAN 2-22, item i; MAN 2-25, B MAN 2-24, item i)<br>• **Delivery scheduling** (B MAN 2-24, item ii; E MAN 2-23, item ii)<br>• **Quality focus** (C MAN 2-23, item ii)<br>• **Joint product design** (E MAN 2-23, item i) | **Benefits/Value Created**<br>• **More business** (A MAN 2-25, item i; C MAN 2-25, item ii;<br>• **Cost reduction** (C MAN 2-24, item ii; MAN 2-26, item i; E MAN 2-25) |

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**Table 7.37 RET 2: Summary of inter-company cost management and the benefits/value created**

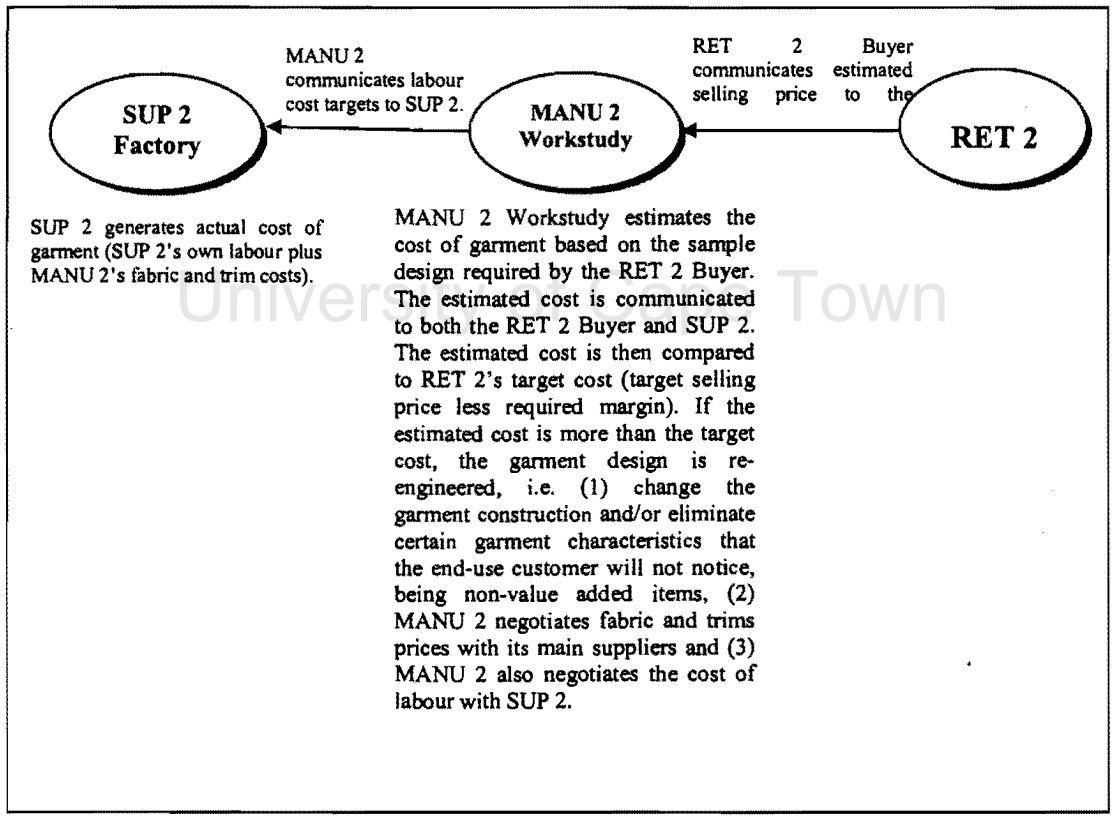
| | Supply Side (with MANU 2) | | Supply Side (with SUP 2) | |
|---|---|---|---|---|
| **Supply Chain 2** | **Techniques/Tools** | **Benefits/Value Created** | **Techniques/Tools** | **Benefits/Value Created** |
| | • **Target Costing** ($G^{RET\ 2-5}$, **(a)** items i to v)<br><br>**Practices**<br>• **Training and assistance** ($G^{RET\ 2-5}$, **(b)** item, i)<br>• **Delivery scheduling** ($G^{RET\ 2-5}$, **(c)** items i, ii, iii)<br>• **Joint product design** ($G^{RET\ 2-5}$, **(d)** items i, ii, iii)<br>• **Open book costing** ($G^{RET\ 2-10}$) | ⇨<br>• **Cost reduction** ($G^{RET\ 2-5}$, **(a)** items ii, iii, iv $^{RET\ 2-5}$, **(e)** item iii)<br>• **Improved profitability** ($G^{RET\ 2-6}$; $^{RET\ 2-11}$, items ii, iii) | • **N/A** ($G^{RET\ 2-17}$)<br><br>**Practices**<br>• **N/A** ($G^{RET\ 2-17}$) | ⇨<br>• **N/A** ($G^{RET\ 2-17}$) |

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*Target costing*

MANU 2 applies target costing at the garment design stage. The objective is to reduce costs so as to meet its customer's cost targets. RET 2 provides MANU 2 with garment cost targets and through meetings between MANU 2 and RET 2 buyers, the garment is re-engineered. This is achieved by changing either the processes required to make the garment, or certain of the characteristics which are seen as unimportant (not noticeable to the end-use customer). Figure 19 below shows how target costing is applied between RET 2, MANU 2 and SUP 2.

**Figure 19 Target costing approach in Supply Chain 2**




The costing of garments is done by MANU 2's workstudy section in the Production department. Labour cost is based on the operations necessary to manufacture a garment. Setting time parameters and identifying necessary operations are the responsibility of workstudy personnel operating in SUP 2's factories. The cost target as set by RET 2 is then broken down into material, trim and labour cost targets. MANU 2's purchasing and

production departments deal with the fabric and trims cost targets in terms of price and material yield, respectively. The labour target costs (in terms of time per operation) are communicated to SUP 2. Thus SUP 2 is also expected to work within the time parameters set by MANU 2's workstudy section.

Starting from the time that the RET 2 Design department approaches MANU 2 with a garment sketch, the costing of a garment goes through various stages. These are:

(i) Pre-costing stage – based on the garment sketch from the designer.
(ii) Sample costing stage – based on the actual garment sample.
(iii) Pre-production stage – based on the chosen samples after necessary changes in quality, construction and trims have been done.
(iv) Factory cost stage – based on actual cost of an approved garment that is sent to the SUP 2 for production.

Meeting the cost target required by RET 2 is therefore a process that goes through different stages, with each stage being the outcome of a negotiated process. Garments are not produced until the target cost has been met, or RET 2 has (on occasion) agreed to increase its target selling price.

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### 7.5.7 Inter-company cost management practices

Inter-company cost management between MANU 2 and its customer RET 2, involves practices such as joint product design, delivery scheduling (supported by collaborative stock planning), quality focus, open book policy and training and assistance.

*Joint product design*

MANU 2 and RET 2 jointly design garments using the Style Management System (SMS) – a system that allows designers to post sketches of their designs, for viewing by the MANU 2 production team. MANU 2's workstudy personnel also post the labour cost of making the respective garment designs on the SMS. The cost of labour is based on the estimated time required to assemble the different trims as per the designs submitted by the designers. Joint product design is a practice that supports target costing between MANU 2 and RET 2. The process of jointly designing garments goes through several

stages, during which both companies share ideas on the design of cost-effective styles. The joint product design processes are described below.

1. **Concept/Design**

   A garment concept or design is the responsibility of the RET 2 designer and buyer in conjunction with MANU 2 personnel. This inter-company team works to plan:

   (i) fabric type
   (ii) style (look)
   (iii) trims
   (iv) outwork (e.g. embroidery)

2. **Pre-costing**

   Rating (trims and fabric needed for one garment) and fabric cost are estimated. Trims, labour and outwork costs are also estimated. The estimated fabric, trims, labour and outwork costs make up the garment's estimated pre-costs.

3. **Sketch of style**

   At this stage, the designer offers a sketch of the garment style with pre-costs to the RET 2 buyer. The buyer either accepts or rejects the garment style. Alternatively, the RET 2 buyer can accept the garment style subject to changes. If there are changes to be made, the process goes back to step 1 then returns to step 3 via step 2. If the style is accepted (confirmed), then the process proceeds to step 4.

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4. **Sample garment**

   Once the RET 2 buyer has accepted a garment style, the confirmed garment style is forwarded for sample making to the pre-production section of MANU 2. Proper costing is now done, based on the actual garment sample and not simply on the sketch of the garment. The cost information is entered on a cost card. Patterns and samples are made using scientifically engineered methods. Labour cost, as well as trims and outwork costs are estimated. A proper rating is now done using the actual garment patterns.

5. **Sample garment and Costing approval**

   The cost card and garment sample are submitted to the designer for approval. If the designer is satisfied, the garment samples go for showing. Garment showing involves MANU 2 showing the garment samples to RET 2 buyers

6. **Showing of garment**

   Showing of garment styles involves showing RET 2 buyers a group of sample garment styles, from which they can choose those in which they are interested. The chosen styles go for quality audit.

7. **Quality audit of samples**

Quality audits involve checking garment samples for:

(i) measurements/fit
(ii) specifications
(iii) quality of make up
(iv) quality of fabric and trims

If any garment sample fails, it is returned for re-make or alterations. Garment samples that pass the quality audit go to the pre-production stage.

8. **Pre-production**

In this stage, the garment styles are put through MANU 2's system for pre-production. Sample and patterns are re-checked and duplicate garment samples are made by MANU 2. Also MANU 2 confirms garment orders with RET 2 buyers. All the necessary documents are prepared and confirmed. One garment sample is sent to RET 2 and another to the CMT chosen for the production of the garment.

9. **Plan style into CMT factory**

The CMT makes two identical copies of the original sample from MANU 2. The samples are sent to MANU 2 for approval. Once the garment designer and RET 2 buyer are happy with the samples from the CMT, production is started. All the garments manufactured are sent to the garments accumulation warehouse and the CMT is paid.

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MANU 2 and RET 2 work closely throughout the above processes, focusing on cost-effective garment styles and alternative fabric and trims that are cheaper but which can still produce the required garment quality. The joint product development process between MANU 2 and RET 2 is supported by regular communication through inter-company teams.

*Open book policy*

Target costing and joint product design are complemented by openness in terms of cost information sharing. The Style Management System facilitates the sharing of cost information in that, RET 2 buyers and merchandisers can access the cost database in the system. They have full access to all garment cost information prepared by MANU 2's workstudy section. This openness allows the companies to discuss alternative ways of making cheaper yet good quality garments.

*Delivery scheduling*

Delivery scheduling between MANU 2 and RET 2 follows a delivery scheduling calendar that is jointly designed during seasonal strategy meetings held between the two companies. The process of timing garment deliveries from MANU 2 into RET 2 stores is explained by the RET 2 merchandise manager as follows:

> "We have a calendar that we use as far as delivery scheduling is concerned. This is initiated during seasonal strategy meetings that we hold with MANU 2 personnel. During these strategy meetings, our garment merchandisers communicate to MANU 2 planning section our expected sales units for the entire season, broken down into monthly figures. When we have our sales meetings during which our buyers actually 'buy' a garment concept, we advise the MANU 2 planners of the styles that we want, units of each style, sizes, and the dates by which the garments should be delivered to our distribution centre. On our side, we have MANU 2's lead time-tables give us an idea of how long it will take to get the garments that we have ordered. Consequently, we are able to plan carefully and almost exactly as to when garments will be in our stores to avoid stock-out costs" (G $^{\text{RET 2-5}}$ (c) items i, ii, iii).

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MANU 2's logistics function works closely with RET 2 merchandise planners to make sure that garments are delivered according to the delivery calendar. The agreed delivery dates are adhered to in order to avoid either stock-out costs or excess stock holdings that can lead to markdowns. (see B $^{\text{MAN 2-24}}$, items i, ii and C $^{\text{MAN 2-23}}$ item i for more details).

*Quality focus*

RET 2's target market in the South African retail industry is the middle- to upper-earning consumer section. As such, quality is a very important factor in the company's ability to compete with other retailers trading in the same market segment. Therefore, quality control is implemented from the time that the fabric is bought by MANU 2, right up to the moment when the garments are delivered to RET 2 stores. As explained earlier under MANU 2's intra-cost management and in the joint product-design section between MANU 2 and RET 2 (e.g. sample quality audits. Also see C $^{\text{MAN 2-23}}$, item ii), quality control is exercised at all the times. MANU 2 also despatches quality auditors to its CMT suppliers' factories, to make sure that garments are manufactured according to the sample garments sent to the CMTs by MANU 2. The quality focus facilitates effective cost

management by eliminating returns from end-use customers which result from poor quality garments. It also reduces or eliminates rejects arising from poor quality fabric and trims and/or poorly manufactured garments.

*Training and assistance*

Training and assistance between MANU 2 and RET 2 take the form of joint workshops, where personnel from both companies are exposed to the best practices in the textile sector. Cross-fertilisation of ideas occurs during these joint workshops, an important factor with regard to joint product design and target costing.

*Benefits/value created*

The inter-company cost management between MANU 2 and RET 2 results in cost reduction for both companies and improved profitability at a group level. Since MANU 2 and RET 2 belong to the same group, the cost reduction efforts within MANU 2 and between MANU 2 and RET 2 are reflected in an improved bottom line from a group perspective. Also, the increase in the volume of business between the two companies is a reflection of their ability to work together to design and manufacture garments that are cost effective and hence competitively priced.

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### 7.5.8 RET 2 Intra-company cost management

Intra-company cost management within RET 2 is implemented through budgetary control (supported by variance analysis) and a team-based approach.

*Budgetary control*

Budgetary control within RET 2 is aimed primarily at containing the cost of samples. The process of planning for each garment season involves the despatching of designers and merchandisers to fashion centres such as London and Paris, to study fashion trends and buy garment samples. The samples are used to design garments which RET 2 sells in South Africa. According to RET 2's Merchandise Manager, such trips can cost in the region of R50 000 per person. In addition to the overseas trips, making up garment

samples to provide to CMTs to use as a standard, is also expensive. Budgets are thus used to put a 'cap' on designers' and merchandisers' expenditure on overseas trips.

According the Merchandise Manager, budgetary control is implemented in the following manner so as to curtail expenditure on garment samples:

> "After a sales meeting, we look at the sample styles that have been sold against the budgeted sales. This helps us to see where we are losing money because as I said earlier, samples consume a lot of money (whether imported or locally made) and it is important for us to see which styles result in business for us, and which ones do not." (G [RET 2-16], item iv).

Budgets are also used to manage the cost of garments that RET 2 buys from manufacturers, including MANU 2. The company's purchases budget is determined by its budgeted sales and buyers are expected to purchase as many garment units as possible with the available funds. In essence, the purchases budget is the source of cost targets that are communicated to MANU 2, resulting in target costing between the two companies. Buyers try as hard as possible to adhere to the budgeted cost per unit of garment (the target cost) in order to protect their margins. Monthly variance reports comparing budgeted expenditure against actual expenditure are produced by the company's Finance department. These reports show unfavourable trends resulting from the failure to contain costs, among other reasons, and areas of concern are identified for rectification.

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*Team-based approach*

RET 2 uses a team-based approach to manage costs within its operations. The use of a team-based approach is to facilitate the creation of cost consciousness throughout the company. As a result, the company is able to reduce its operating costs, for example, by recycling much of the paper used in its design room.

Table 7.38 overleaf gives a summary of the intra-company cost management techniques and practices used by RET 2. As shown in Table 7.38, the value created is identified in terms of cost reduction.

**Table 7.38 RET 2: Summary of intra-company cost management and the benefits/value created**

| | | |
|---|---|---|
| **Supply Chain 2** | **Techniques/Tools**<br>• **Budgetary control** ($G^{RET\ 2\text{-}12}$, item i; $^{RET\ 2\text{-}13}$; $^{RET\ 2\text{-}16}$, item i, iii)<br>• **Variance reports** ($G^{RET\ 2\text{-}16}$, item ii)<br><br>**Practices**<br>• **Team-based approach to cost management** ($G^{RET\ 2\text{-}15}$) | **Benefits/Value Created**<br>⇨ • **Cost reduction** ($G^{RET\ 2\text{-}5}$, (e) item i; $^{RET\ 2\text{-}12}$, items i, ii, iii) |

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**Table 7.39 SUP 2: Summary of inter-company cost management and the benefits/value created**

| | Supply Side (with key Suppliers[23]) | | Demand Side (with MANU 2) | |
|---|---|---|---|---|
| Supply Chain 2 | Techniques/Tools | Benefits/Value Created | Techniques/Tools | Benefits/Value Created |
| | | | • **Target costing** ($F^{SUP\ 2-5}$, **(a)** items i, ii, iii) | |
| | Practices | | Practices | |
| | | | • **Training and assistance** ($F^{SUP\ 2-5}$, **(b)** ) | |
| | | ⇨ | • **Product delivery scheduling** ($F^{SUP\ 2-5}$, **(c)** items i, ii) | ⇨ • **Company growth through additional business** ($F^{SUP\ 2-5}$, **(e)** item iv) |
| | | | • **Joint product design** ($F^{SUP\ 2-5}$, **(d)** ) | • **Cost Savings** ($F^{SUP\ 2-5}$, **(e)** item iii) |
| | | | • **Inter-company investments** ($F^{SUP\ 2-5}$, **(e)** item i) | |
| | | | • **Vendor managed inventory** ($F^{SUP\ 2-5}$, **(e)** item ii) | |
| | | | • **Supplier 'association'** ($F^{SUP\ 2-5}$, **(e)** item v) | |
| | | | • **Cost savings sharing through margins** ($F^{SUP\ 2-6}$) | |
| | | | • **'Open book' accounting** ($F^{SUP\ 2-6}$) | |

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[23] SUP 2 is largely a 'labour broker', thus MANU 2 supplies almost all the fabric and trims required to manufacture garments for RET 2. The only supplier that SUP 2 has is a company that supplies fused collars as will be explained later on page 191.

### 7.5.9 Supply side

Cost management on the supply side of Supply Chain 2 involves the interaction between MANU 2 and SUP 2. Table 7.36 on page 179 (the left-hand side) and Table 7.39 above (on page 189 the right-hand side) show the cost management techniques and practices applied at the interface between TFGFA and SUP 2. The only inter-company cost management technique used between the two companies is target costing as discussed earlier (refer to figure 19 on page 181).

## 7.6 Inter-company cost management practices

The main inter-company cost management practices employed between MANU 2 and SUP 2 include price negotiation, quality control, continuous improvement, training and assistance, vendor-managed inventory, product delivery scheduling, inter-company investments, bulk orders, inter-company teams, open book policy and sharing of cost savings.

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Price negotiation and quality control have already been discussed under MANU 2's and RET 2's inter-company quality focus. MANU 2 sends its quality controllers into SUP 2s factories to monitor the manufacture of garments. Quality audits are performed at random by the quality controllers to ensure that garments coming out of SUP 2's factories will meet RET 2's quality requirements. Price negotiation is used to support target costing, where the target cost communicated to MANU 2 by RET 2 is difficult to meet. In addition to price negotiation with fabric and trims suppliers, MANU 2 also negotiates the labour cost targets with SUP 2 with the objective of reducing the cost of garments.

*Continuous improvement*

Continuous improvement is implemented with the support of MANU 2's workstudy section. The section's role is to continuously review the time allowable per garment-making operation with a view to reducing it. Thus when MANU 2 communicates labour cost targets to SUP 2, the targets are based on operations times that have been reviewed in accordance with the nature of the operations to be performed. The levels of experience and training applicable to SUP 2's factory employees are also taken into account. The

idea is that new operations should take longer than well-established operations for which experience has been accumulated over the years. As SUP 2's factory employees benefit from learning curve effect, the times allowable for new operations are gradually reduced, resulting in labour cost savings.

*Training and assistance*

SUP 2 recently established a 'Learnership Centre' which is responsible for the training of its factory personnel. This concept, as explained by SUP 2's managing director, is new in the industry and thus to MANU 2 as well. SUP 2 provides MANU 2 with advice on the functioning of this program. MANU 2's designers also assist SUP 2's factory employees to make the garments required by RET 2 in accordance with the garment samples approved by RET 2's buyers. This symbiotic relationship between the two companies enables them to achieve the mutual transfer of skills and thus, in a short period of time, achieve the efficiency levels required to reduce costs of garment manufacture.

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*Vendor-managed inventory*

MANU 2 has an arrangement with SUP 2 that transfers responsibility to SUP 2 for the buying and managing of certain garment trims such as fused collars. Over the years, SUP 2 has established cost-effective methods of ordering and managing such inventory which are superior to MANU 2's. Thus, instead of MANU 2 buying and managing such inventory, it is cost effective for the tasks to be performed by SUP 2. (see F $^{\text{RET 2-5}}$, (e) item ii for more details).

*Delivery scheduling*

When scheduling deliveries between MANU 2 and SUP 2, there are two aspects to be considered. The first relates to the delivery of inputs (fabric and trims) by MANU 2 to SUP 2's factories. This is due to the fact that, apart form the inventory that SUP 2 manages (as discussed above), the company's main responsibility is the manufacture of garments (hence cut-make-and-trim – CMT). Thus it is the responsibility of MANU 2 to buy fabric and trims and supply them to SUP 2.

The second aspect involves the timely delivery of manufactured garments from SUP 2 to RET 2's style accumulation warehouse. This process is synchronised with the seasonal stocking of RET 2's stores. Both the first and the second aspects are carefully planned to ensure that, taking into account both SUP 2's lead-times and RET 2's store planners' garment in-store dates, MANU 2 delivers inputs on time and SUP 2 delivers the garments on time. Where there are delays on MANU 2's part, SUP 2 communicates the difficulties it encounters as a result. The managing director of SUP 2 put it this way:

> We make sure that we communicate with our customer [MANU 2], in writing, about the cost implications of late deliveries. By communicating with our customer in writing upfront, we are in a position to manage costs caused by late deliveries of inputs." (F $^{SUP\ 2\text{-}5}$, (c) item ii)

*Inter-company investments/Financial assistance*

The management of cost through inter-company investments may be achieved in a number of ways. It may take the form of a machine that is bought by MANU 2 for use by all eight of its CMT suppliers, including SUP 2. It may also take the form of a 'soft' loan offered to SUP 2 and other CMT suppliers by MANU 2 to recapitalise their operations. SUP 2's managing director explained how the sharing of a machine's might be achieved:

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> "We also collaborate with our key customer [MANU 2] to manage costs of investments in our factories. For instance, instead of us buying a specialised machine that we may just use once a year, MANU 2 buys the machine and then lends it to us periodically. The same machine may also be lent to other CMT suppliers that deal with MANU 2. That way, we manage to reduce the cost of investment by, in a way, sharing the cost of one machine among all the eight CMTs. This in turn reduces the cost of garments that we make in our factories." (F $^{SUP\ 2\text{-}5}$, (e) item i).

By offering financial assistance in the form a 'soft' loan to SUP 2, MANU 2 hopes to improve efficiency within SUP 2's factories as a way of reducing costs. (see E $^{MAN\ 2\text{-}21}$ for more details). Both companies benefit in that MANU 2 gets better quality garments at lower cost and SUP 2 improves its operations.

*Bulk orders*

MANU 2 places bulk garment orders of the same style with SUP 2 to enable the company to extend its productions runs. Thus SUP 2 achieves cost savings (which benefit both

companies) by avoiding setup costs and by taking advantage of the learning curve effect. MANU 2's Senior Finance Manager explains how bulk orders in respect of new products reduce costs as follows:

> "We focus on economies of scale and the learning curve effect. An important area in the cost of garments relates to volume. What is costly to the CMT manufacturer is to have numerous lines of different products. The greater the volume of the same products they deal with, the lower the cost due to the economies of scale. The learning curve effect is also important because labour cost goes down as more units of the same garment are made by the CMT suppliers. This is advantageous to the CMT manufacturer as well as to our company in terms of cost savings." (E $^{MAN\ 2\text{-}8}$, items i, ii).

In addition to placing bulk garment orders during peak times, MANU 2 also supports SUP 2 during difficult (low-demand) times. The SUP 2's managing director explained the cost advantages from such support by saying that:

> ".....they [MANU 2] try to makes sure that our factories are always fully booked. Our customer always supports us, even when times are hard (low activity periods in the market). For instance, during this difficult period, our customer asked us to increase our output to enable us to increase our turnover as a way of keeping our unit costs down." (F $^{SUP\ 2\text{-}5}$, (e) item iv)

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Bulk buying also involves the purchase of all CMT fabric requirements from a very limited number of fabric suppliers. MANU 2 combines the fabric requirements of all its CMT suppliers into larger orders, thereby enabling the company to achieve quantity discounts.

*Inter-company teams*

MANU 2's workstudy personnel (including costing personnel) work closely with SUP 2's factory personnel to establish labour cost targets. They also undertake time and motion studies in the quest for continuous improvement. MANU 2 has a dedicated factory manager who spends 90 percent of his time in the CMT factories, including SUP 2's factories. The factory manager is regarded as a technical 'trouble shooter' whose task is to assist SUP 2 (and the other CMTs) to overcome any problems which may arise.

In addition to the dyadic relationship between MANU 2 and SUP 2, the functioning of inter-company teams occurs at another platform; 'supplier association'. This approach encompasses representatives from all the eight CMTs that deal with MANU 2, plus MANU 2's personnel. The CMT representatives meet with MANU 2 to discuss common problems and come up with joint problem solving initiatives. The SUP 2 managing director explains how the supplier association works.

> "Six months ago, we initiated MANU 2/CMTs meetings. These are meetings that involve our customer [MANU 2] and all the CMTs that supply MANU 2. The idea here is to discuss issues of common interest such as productivity, cost savings and training. Thus instead of CMTs competing against each other for MANU 2 business, we decided to come together and work towards our common good by focusing on areas of mutual concern"[24]. (see F $^{SUP\ 2\text{-}5}$, items (v) $_{(a)}$ & $_{(b)}$ for more details).

*Open book policy*

The open book policy enables MANU 2 and SUP 2 to identify and share cost saving ideas. MANU 2 knows SUP 2's labour costs and margins and SUP 2 is familiar with MANU 2's margins as well. However, despite this openness, there is a lack of transparency when it comes to the sharing of certain labour cost information (in particular, the provision of allowable production times. The SUP 2's managing director explained the sharing of cost information this way:

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> "MANU 2.....gives us the estimated cost of labour per garment (in terms of allowable minutes). If we cannot meet that cost, i.e. our labour cost is more than the expected labour cost, we at times give them a discount. However, these days MANU 2 does not give us the allowable time per garment; they keep it a secret. They want us to tell them what we think the time should be. If we say 20 minutes, for instance, they can say, ok we can give you 22 minutes. This would show us that we would have under-costed the garment. If we say 28 minutes for example, they would say we should reduce to say 25 minutes. Sometimes the 28 minutes are used for bargaining; our estimated time could probably be 23 minutes. So if they give us 25 minutes, we benefit." (F $^{SUP\ 2\text{-}5}$, (a) items ii, iii)

[24]Minutes of the meetings that the 'association' has had in the past six months were also made available to the researcher.

*Sharing of cost savings*

Cost savings achieved between MANU 2 and SUP 2 are shared by way of margin adjustments. Both companies therefore benefit from the cost savings, ensuring a win-win situation.

*Benefits/value created*

The cost management techniques and practices applied at the interface between MANU 2 and SUP 2 result in cost reductions, the growth of mutual business and the creation of a long-term trust-based relationship.

### 7.6.1 SUP 2: Intra-company cost management

SUP 2's cost management is achieved through budgetary control, production line profitability analysis, team-based learning and problem-solving and quality focused employee training. These cost management techniques and practices are set out in Table 7.40 on page 196.

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*Budgetary control & production line profitability analysis*

These techniques are used to manage costs along the factory production lines. The objective of performing profitability analysis for each production line is to enable the company to identify and hence focus on lines that are inefficient, i.e. where employees take longer to make garments than expected. SUP 2 is paid for garment manufacture based on the agreed/allowable time negotiated with MANU 2. Where employees take longer than expected, the extra time is not paid for, resulting in SUP 2 absorbing the costs. Thus production line profitability analysis (the amount charged to MANU 2, less labour costs plus machine costs) enables SUP 2 to deal with loss-making lines.

Profitability analysis is used in conjunction with budgets. Budgeted labour hours on garment styles ordered by MANU 2 are compared with actual hours on a production line basis. These figures are reviewed monthly so as to detect unfavourable trends. The idea is to arrest any detected unfavourable trends before significant losses are incurred.

**Table 7.40 SUP 2: Summary of intra-company cost management and the benefits/value created**

| | | |
|---|---|---|
| **Supply Chain 2** | **Techniques/Tools**<br>• **Production line profitability analysis** ($F^{SUP\ 2\text{-}15}$, item ii, iii)<br>• **Budgetary control** ($F^{SUP\ 2\text{-}15}$, item i)<br><br>**Practices**<br>• **Employee training** ($F^{SUP\ 2\text{-}11}$, item ii; $F^{SUP\ 2\text{-}15}$, item iv $_{(b)}$)<br>• **Team-based learning & problem-solving** ($F^{SUP\ 2\text{-}11}$, item iii, iv; $F^{SUP\ 2\text{-}14}$; $F^{SUP\ 2\text{-}15}$, item iii $_{(c)}$)<br>• **Quality focus** ($F^{SUP\ 2\text{-}15}$, item iii $_{(a)}$) | ⇨ • **Cost reduction** ($F^{SUP\ 2\text{-}15}$, item iv)<br>• **Improved profitability** ($F^{SUP\ 2\text{-}15}$, item iv) |

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*Team-based learning & problem solving*

A team-based approach supports both budgetary control and production line profitability analysis. This practice allows factory teams to learn from each other and to jointly solve problems encountered in the factories. The SUP 2 managing director explained the company's team-based approach as follows:

> "Our approach every month is to look at the bottom 30 percent of achievers. We then work as a team, the good performers and the underachievers, to find solutions. The good performers share their knowledge and experiences with the underachievers to come up with solutions that can be implemented to improve productivity. Thus our factory employees are constantly learning from each other to find better ways of doing things." ($F^{SUP\ 2\text{-}11}$, items iii, iv).

The focus of the team-based approach within SUP 2 is continuous improvement through knowledge transfer within the factories. The team-based approach creates synergies that result in cost reduction.

*Employee training*

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Employee training within SUP 2 is aimed at improving efficiency, which results in higher productivity. The company has a learnership centre where employees' skills training takes place. The company's approach is that on-the-job learning should be refined at the learnership centre. This approach is seen as very important particularly due to the highly competitive environment in which the company operates. This sector of the South African retail industry is characterised by tight margins, intense competition and quick turnaround times that demand an efficient workforce. Thus SUP 2 achieves cost savings (less time per garment-making operation) due to skills imparted to employees in its learnership centre.

*Quality focus*

Quality is a key factor in the relationship between MANU 2 and SUP 2 because of the competitive market segment in which RET 2 operates. Thus through training and the thorough control of quality standards along its factory lines, the company reduces the cost of both rejects and returns from RET 2 stores. SUP 2 employs a quality supervisor for

every production line in the factory, whose task is to maintain quality standards as required by MANU 2.

*Benefits/value created*

Through the application of the above cost management techniques and practises within its operations, SUP 2 achieves cost reductions and improved productivity.

### 7.6.2 Conclusion

Value creation in Supply Chain 2 is interpreted in terms of cost reduction, improved profitability, a long-term trust-based relationship, improved productivity and company growth. Value is a result of the application of intra- and inter-company cost management techniques and practices.

**Table 7.41 Supply Chain 2 Classification of cost management techniques & practices**

| | Traditional management accounting | Advanced management accounting | Other |
|---|---|---|---|
| **Technique/ tool** | Budgetary control<br>Variance analysis<br>Transfer pricing | Target costing<br>Continuous improvement (Kaizen)<br>Benchmarking | Forward cover |
| **Practice** | Bulk orders | Open book policy | Price negotiation<br>Inter-company investments<br>Delivery scheduling<br>Training & assistance<br>Joint problem-solving<br>Quality focus<br>Collaborative stock-planning<br>Inter-company teams<br>Sharing of cost savings<br>Vendor-managed inventory |

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The most widely used intra-company technique is budgetary control, while the most common inter-company technique is target costing. Teamwork, quality focus and

delivery scheduling are practices that transcend company boundaries. In this supply chain, most of the techniques could be classified as traditional management accounting techniques (e.g. budgetary control and variance analysis). Although many of the cost management practices cannot be classified within the traditional or advanced management accounting categories ('other' in Table 7.41 on page 198), it can be argued that they provide considerable support to these disciplines. The practice of continuous improvement benefits most from this support[25].

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[25]More about the application of these practices is discussed in chapter eight.

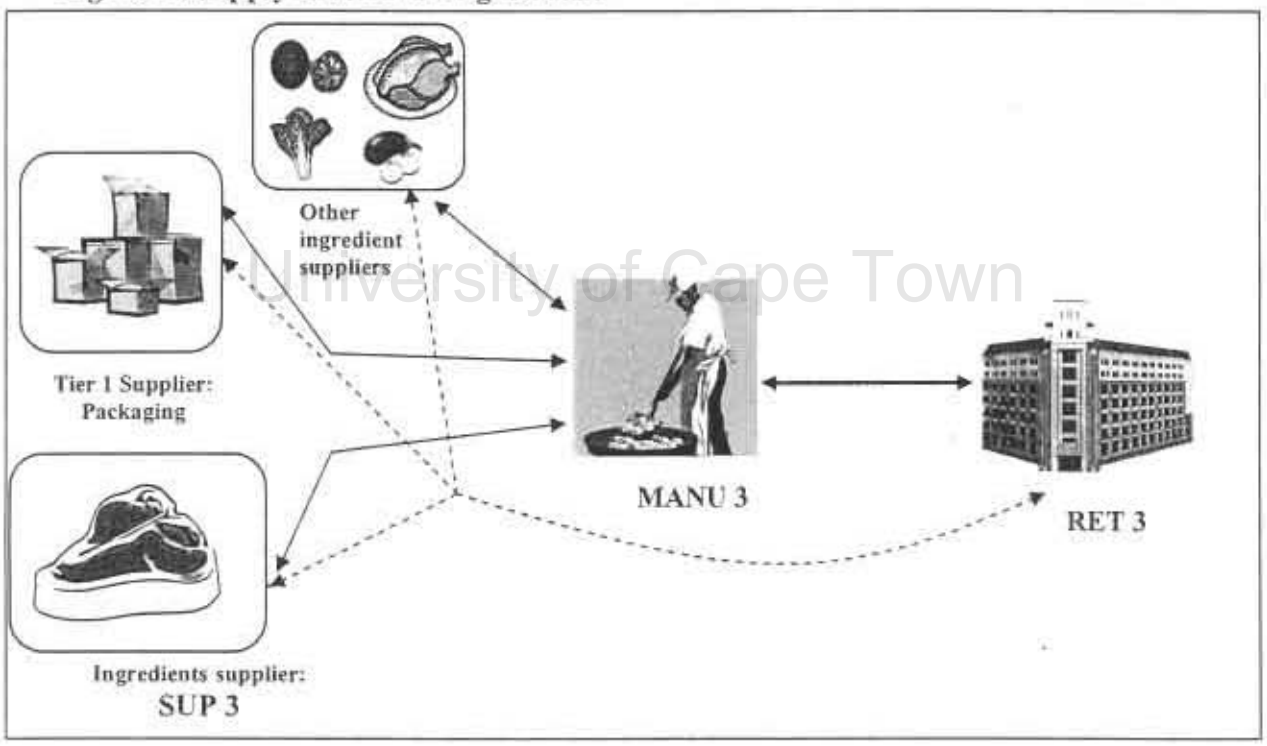
## 7.7 Section B: Food Sector

### Supply Chain 3

### 7.7.0 Background

MANU 3, SUP 3 (key ingredients supplier) and RET 3 constitute Supply Chain 3.Within this supply chain, the retailer has a strong influence on the activities and processes undertaken because the products produced and sold bear its brand name. Figure 20 below depicts the configuration of Supply Chain 3.

**Figure 20 Supply Chain 3 configurations**




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### 7.7.1 Company specific studies

#### MANU 3

MANU 3 was established in the 1970s as a family business selling vegetables to retail outlets. The company has developed from a one-person managed organisation into a company with a staff complement of 300 people. In the early 80s, the quality of the company's vegetables appealed to RET 3, one of the big retailers in the food sector of the

South African retail industry. MANU 3 began to provide value-added vegetables (i.e. prepared vegetables ready to cook) to RET 3. That was the beginning of a relationship that has grown over the years and has benefited both parties. In 1986, MANU 3 moved to the industrial area of Somerset West where it traded on rented premises until 1995 when it established its first factory. This was followed by another factory in 1998 and a third one in 2001. In 2003, the company began the construction of its fourth factory as business had continued to increase due to its relationship with RET 3.

Of the 300 employees, 50 are in managerial positions and 250 work in the factories. The organisation structure of the company includes the Chief Executive Officer (CEO), Operations Director (OD), finance manager, purchasing manager, maintenance manager, factory managers, food technologists, product development manager, personnel manager and factory employees. The company is divided into four main sections – the administration unit, production unit, purchasing unit and the maintenance unit. Under administration are included those functions which administer debtors, creditors, payroll, personnel and product development. The production unit consists of factory managers, factory employees and food technologists (quality controllers). The purchasing unit is responsible for buying ingredients, vegetables and packaging. The maintenance unit ensures that all the machines used in the factories are in good working order. The company does not have its own logistical function, but due to the nature of its relationship with its sole customer, is able to rely on RET 3's logistical support. (The relationship between MANU 3 and RET 3 has grown over the years such that the company only produces for RET 3). All the products produced in MANU 3's factories are RET 3 branded products. The company produces products in three factories as follows: factory 1 produces fruit juices, factory 2 produces soups and recipe dishes, and factory 3 prepares vegetables and takeaway foods such as sandwiches and hamburgers. The factory under construction will be dedicated to recipe dishes and a new line of business– pizzas and quiche.

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The main costs to the company are food ingredients, followed by packaging and then labour. The company buys vegetables, beef and chicken from farmers around the country

and at times even imports chicken when the local prices are too high. SUP 3 is one of its key local beef suppliers. Due to the nature of the relationship between MANU 3 and RET 3, the retailer determines where the company buys its inputs, i.e. MANU 3 may only deal with vegetable, ingredients and packaging suppliers whose quality and ethical standards have been approved by RET 3.

**RET 3**

RET 3 is a division of the African Retailers Group and operates in the food sector of the South African retail industry. The company's target market is the middle- to upper-earning segment of the South African market. RET 3 maintains a strong influence along its supply chain with MANU 3 and SUP 3. It operates distribution centres (DCs) that serve as the hub to which all its suppliers deliver their products, and from which those products in turn are delivered to its stores. Since the products sold in its stores bear its brand name, RET 3 ensures that the quality of the products match the image and reputation that it has created over the years as a provider of high quality, unique products. RET 3 buys products such as soups, prepared meals, salads, pies, prepared vegetables and sandwiches from MANU 3. RET 3 sources its high-quality products from about 500 different suppliers, of which MANU 3 is the 6$^{th}$ largest.

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**SUP 3**

SUP 3 is a beef processing company that started business as a butchery, i.e. buying and selling meat to the public. Over the years, the company left the retail butchery business so as to focus on the commercial catering sector. It now buys and processes beef into sausages, mince and steak for the hospitality industry (hotels and restaurants, particularly tourist resorts), as well as supplying manufacturing companies like MANU 3 which are involved in the preparation of meals. The quality of the beef products that the company sells is classified as super triple 'A', hence its target market comprise those companies whose clientele make up the middle- to upper-earning sector of the South African market. MANU 3 is one of SUP 3's key customers and the companies have a close working relationship. Although SUP 3's products had to be approved by RET 3 before SUP 3 could do business with MANU 3, there is very little interaction between RET 3 and SUP

3. Figure 21 on page 204 presents the key processes within Supply Chain 3, as far as the development of a new product is concerned.

### 7.7.2 MANU 3 Cost management issues

MANU 3's cost management is largely influenced by its relationship with RET 3. As a one- hundred-percent supplier of its customer's branded products, MANU 3 can only do business with suppliers that have been selected by RET 3. In addition to this constraint, MANU 3 makes perishable products which involve short lead times. This presents a particular challenge to the company, namely the need for flexibility in its production activities. The company's intra- and inter-company cost management techniques and practices are discussed below.

### 7.7.3 Intra-company cost management

MANU 3's intra-company cost management is effected through techniques such as target costing, budgetary control supported by variance analysis, and a number of practices such as quality focus, employee training, team-based approach, and the management of product mix. Table 7.42 on page 205 below gives a summary of the cost management techniques and practices used by MANU 3 within its operations.

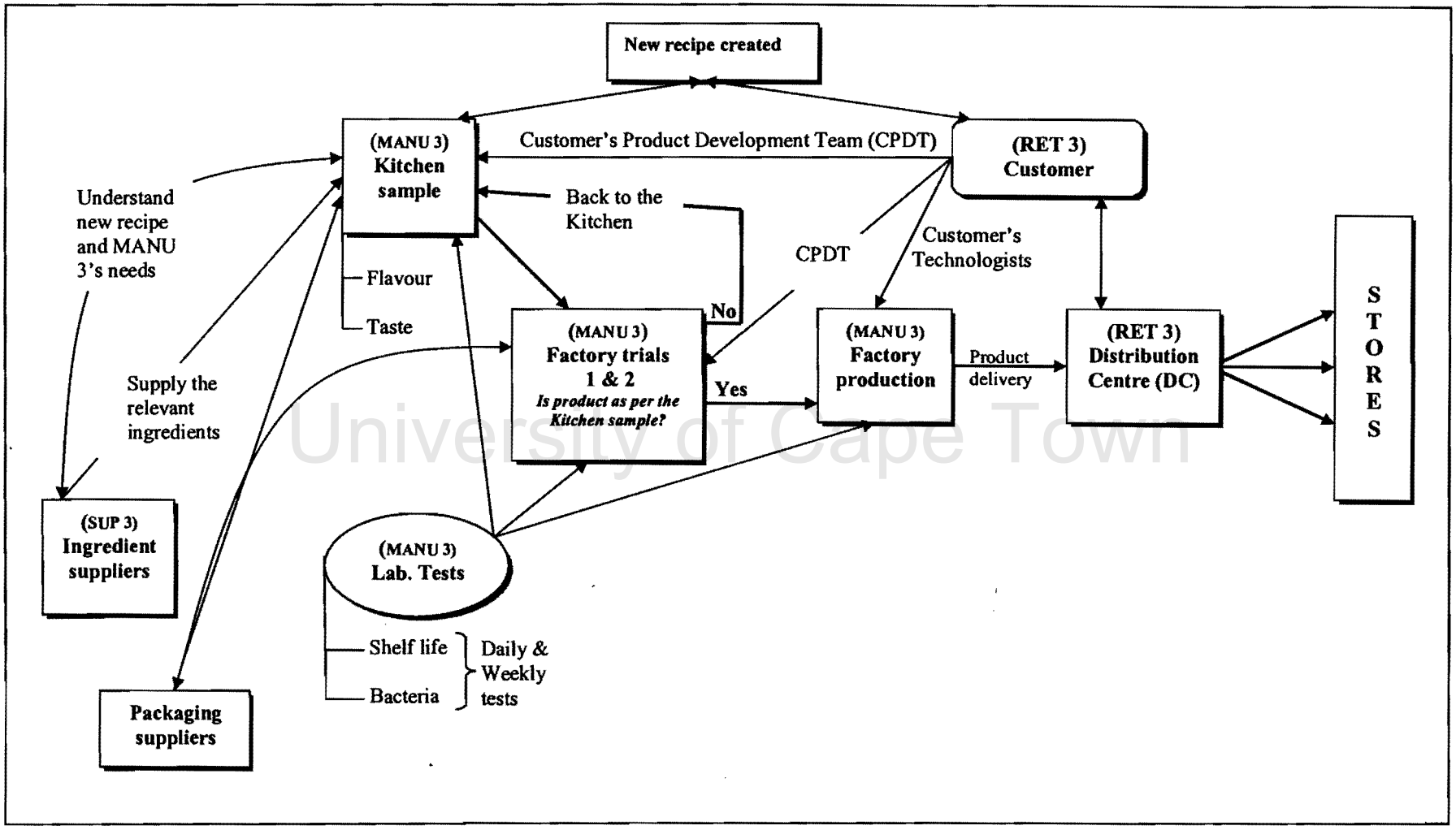
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### 7.7.4 Cost management techniques/tools

*Target costing*

Target costing is a technique that is used during the product development stage, within the Product Development Centre (PDC), before the product gets to the factory. The objective of applying target costing at this stage is to come up with a product recipe whose cost will allow the company to make a profit. MANU 3 uses target costing during the kitchen and factory trials shown in the diagram above. Proposed product recipes that fail to show a profit at this stage are re-engineered, i.e. certain changes are made to the recipe or the ingredients, without sacrificing the quality of the product. Price negotiation with ingredient suppliers is also explored as a way of reducing the cost of the proposed recipe. Once the target cost is reached and the recipe satisfies the quality and taste requirements, the product is then handed over to the factory manager for launching.

**Figure 21 Key processes within Supply Chain 3**




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**Table 7.42 MANU 3: Summary of intra-company cost management and the benefits/value created**

**Supply Chain 3 MANU 3**

| Purchasing | Logistics | Production | Sales & Marketing | Finance |
|---|---|---|---|---|
| **Techniques/Tools**<br>• **Variance analysis** (A MAN 3-12, items i, ii)<br><br>**Practices**<br>• **Quality focus** (A MAN 3-8, item i (b); MAN 3-9, item i)<br>• **Part of multi-functional team** (A MAN 3-8, items i; MAN 3-9, item ii; MAN 3-16) | **Techniques/Tools**<br>• **N/A** (B MAN 3-1)<br><br>**Practices**<br>• **N/A** (B MAN 3-1) | **Techniques/Tools**<br>• **Target costing** (C MAN 3-8, items i, ii, iii (c))<br>• **Variance analysis** (C MAN 3-8, items iv (a), (b); MAN 3-12, items i, ii, iii, iv, v)<br><br>**Practices**<br>• **Management of product mix** (C MAN 3-2, items i, ii, iii; Man 3-8, item iv (c))<br>• **Training** (C MAN 3-8, items iii (a), (b), (c))<br>• **Team-based approach** (C MAN 3-5, item ii)<br>• **Quality focus** (C MAN 3-5, item iii) | **Techniques/Tools**<br>• **N/A** (D MAN 3-2; MAN 3-3)<br><br>**Practices**<br>• **N/A** (D MAN 3-2; MAN 3-3) | **Techniques/Tools**<br>• **Variance reports** (E MAN 3-4, item ii)<br>• **Target costing** (E MAN 3-26, item ii)<br><br>**Practices**<br>• **Part of a multi functional team** (E MAN 3-16, items i, ii) |

**Cost reduction** (A MAN 3-8, item ii; C MAN 3-4, items i (a), (b), (c), (d); MAN 3-5, item ii; MAN 3-7, items i, ii, iii;

**Improved profitability** (C MAN 3-5, items i (a), (b))

**Operational efficiency** (C MAN 3-2, items i, ii, iii)

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*Budgetary control*

Budgets are widely used to manage MANU 3's departmental operating costs, as well as the cost of production inputs. Budgets are set for each financial year by the Finance department with the involvement of the other departments. Departments are supported by Finance department, who produce monthly management accounts which show variances arising from input prices, labour efficiencies, and ingredient yields. The way in which MANU 3 interprets variances depends on the season and the nature of the product under review (for more details refer to C $^{MAN\ 3\text{-}12}$, item v).

The company has several options for cost containment within the parameters set by the budgets. It can, for instance, use flexible working hours for staff in its factories (for example see C $^{MAN\ 3\text{-}26}$, items ii, iii $_{(a)}$ & $_{(b)}$ for more details). This flexibility allows MANU 3 to reduce labour cost during off-peak periods and increase its capacity during peak periods. In addition to the flexible working hours, the company now takes a pro-active approach in managing the costs of its inputs through price negotiations with suppliers.

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The above intra-company cost management techniques are used in conjunction with the intra-company practices discussed below.

### 7.7.5 Cost management practices

*Quality focus*

Quality is an imperative for MANU 3 because of the target market that its customer serves. The company's quality approach starts with the purchasing of high quality ingredients. Within its operations, strict factory quality standards are adhered to by all employees. MANU 3's factories are divided into segments[26] for hygiene purposes as a way of eliminating product contamination (as explained in C $^{MAN\ 3\text{-}26}$, items vi $_{(a)}$, $_{(b)}$, $_{(c)}$ &

[26] In addition to the interviews conducted with factory managers, this section is also based on the researcher's experience during a 3 hour tour of the factories. During the tour, the researcher had to take all the steps taken by the company's employees, i.e. washing of hands, wearing gumshoes and the appropriate uniform for each section.

(d)). Factory areas are designated low risk ('dirty section') and high risk ('clean section') to ensure that the appropriate steps are taken by employees in each section to maintain the hygiene standards. The 'dirty' section is where vegetables from suppliers are cleaned. Once they have been cleaned and checked by a supervisor, the vegetables are transferred through a conveyor belt to the 'clean section'. There is no interaction between employees working in the 'dirty' section and those in the 'clean' section during factory hours, apart from the employees' statutory breaks. This measure is supported by the use of different uniform colours for employees in the different sections.

MANU 3 applies a first-in-first-out (FIFO) method of using ingredients and this method is supported by colour-coded ingredient containers to indicate when ingredients were produced. This is done to facilitate the application of the FIFO method, i.e. to ensure that ingredients are used in the order in which they were received, so that a consistent standard of freshness is maintained. Furthermore, product testing is doe daily and weekly to check for bacterial presence and on-shelf life. The factories are cleaned after hours every day by a third party and MANU 3's laboratory personnel conduct tests the following morning, before the factories begin production, to ensure that no contaminants are present. All these steps are taken to ensure that the company's products are of high quality, free from contamination, last for the specified shelf life, and satisfy the quality requirements of RET 3. The costs of poor quality and food contamination (which may entail huge losses) are significantly therefore reduced.

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*Training*

Training of factory employees is done in the context of new products. MANU 3's new products are developed by the Product Development Centre (PDC) in the company's kitchens. Once a product's recipe has met quality, taste and cost standards, (a process that can take up to six months), factory trials are undergone to ensure that the same quality can be attained in the factory environment. It is at this stage that the PDC trains the company's factory personnel to produce the product in accordance with the recipe. The training is done in stages, referred to as sessions, and there are three separate sessions, i.e. sessions 1 to 3 (see C $^{MAN\ 3\text{-}8}$, items iii (a), (b) & (c)) for more details). The aim of these

training sessions is to allow the factory personnel to experience the learning curve effect, so as to reach the desired efficiency levels (in terms of time allowed) and ingredient yields (in terms of allowable waste), before the product is launched. Thus through employee training, the company's efficiency focus (see C [MAN 3-5], item i; [MAN 3-7], items i, ii, iii) bears fruit in form of cost reduction.

*Team-based approach*

MANU 3 uses a team-based approach at both the product development and the post-launch stages. At the product development stage, the process of creating the best quality recipes draws in personnel from both purchasing and finance. The purchasing personnel's role is to suggest and source the best quality ingredients at the most favourable price. Finance's role at this stage is to evaluate the commercial viability of the proposed product. Thus the PDC works closely with purchasing and finance personnel, right up to the time when the product is handed over to the factory managers. This practice supports target costing, in that the team members collectively look for ways of developing a cost-effective product. In the factories, MANU 3 uses group-based incentives. Bonuses are given to all employees should a factory achieve its targeted cost reduction. The company also maintains a Cost Accountant in the factories to assist in the identification of cost reduction opportunities through cost driver analysis (see C [MAN 3-6], item ii).

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*The management of product mix*

The efficient flow of production in the factories is closely monitored by factory managers to ensure that there are no bottlenecks. This is particularly important for MANU 3 due to the short lead times between receiving an order from RET 3 and delivering the required products. The management of the product mix in each factory is seen as crucial to the achievement of efficiency. Management of the product mix takes the form of:

(1) focusing on similar products in each factory, and
(2) reducing the volume of products manufactured in each factory.

The first measure aims to derive synergistic benefits (in terms of improved efficiencies, leading to time and cost savings) by grouping similar activities in one location. The

second approach simplifies work flow in the factories (by decongestion of the factories) to ensure that factory personnel have sufficient work space.[27] These measures allow factory employees to be efficient (due to similar tasks being performed in the same factory) and productive (due to the provision of ample space within which to work), both of which result in cost savings. The management of product mix is supported by a strong focus on waste reduction and ingredient yield maximisation.

### 7.7.6 Inter-company cost management

Inter-company cost management techniques and practices involve ingredient and packaging suppliers (in the context of this research, with SUP 3, an ingredient supplier) and MANU 3's only customer (RET 3 on the demand side). These techniques and practices are summarised in Table 7.43 on page 211 (MANU 3 with both RET 3 on the demand side, and SUP 3 on the supply side) and Table 7.44 on page 212 (RET 3 with MANU 3).

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### 7.7.7 Demand side

As stated earlier, activities and processes in Supply Chain 3 are largely influenced by RET 3 because it owns the brand name of products sold to end-use customers. Thus the cost management techniques and practices applied along the supply chain with MANU 3 support the strategic thrust of RET 3's business.

### 7.7.8 Cost management techniques/tools

*Target costing*

RET 3 manages the cost of food products purchases from MANU 3 by using target costing. This is based on RET 3's budgeted purchases and margins. When RET 3 sets its purchasing budgets, the budgeted cost per food item becomes the target cost that is communicated to MANU 3. In addition to this figure, RET 3 also gives MANU 3 its target selling price for the food item, plus its required margin. RET 3's product development team then works hand in glove with MANU 3's PDC to create a recipe

[27] This is recognition of the Law of diminishing returns in that, given the fixed factory space, increasing the volume of products will cause appoint to be reached where the return per square meter becomes less and less as the factory becomes increasingly congested.

which will enable the product to be sold at the target selling price as determined by RET 3's market research.

Sometimes a kitchen sample is produced which, in terms of taste and quality, is seen as appealing to the end-use customers. However, its cost-to-make (ingredients, packaging, labour and MANU 3's required margin) may be above the price that RET 3 is willing to pay. The two teams then look for alternative ways of reducing costs or increasing the selling price of the product. The following steps are taken to ensure that the cost targets are attained before the product is launched:

(1) MANU 3 negotiates with its ingredient and packaging suppliers to reduce their prices, particularly where sales volumes (and hence packaging purchases) are expected to be high.
(2) The product is re-engineered, i.e. the recipe is changed in such a way that the taste and quality of the product will not be affected. Substitute ingredients can be used and/or simpler factory processes employed to make the product.
(3) MANU 3 negotiates with RET 3 to increase the selling price of the food item in order to absorb the cost that cannot be reduced.
(4) The last option is not to launch the product, where cost reductions achieved and selling price adjustments made do still not justify making and selling the product to end-use customers.

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The achievement of cost target is particularly important in this supply chain due to competition in the local market. From RET 3's side, the new product development department is being revamped to make it more structured. As the Supply Chain Manager of the company put it:

> "The idea here is that before a product is developed, we have to take into account upfront, from a commercial point of view, what exactly we want to do, where the product fits into the Foods Division products category, what do competitors have, what are the expected costs, the selling price and the margins. Once all these have been understood and approved, we can then have a commercial view of the product, and the [product] development takes place." (G $^{\text{RET 3-5}}$, (a) item vi).

Thus the use of target costing is seen as an integral part of achieving a commercial view of all new products due to the level of competition as well as the strategic thrust of the company.

**Table 7.43 MANU 3: Summary of inter-company cost management and benefits/value created**

| Supply Side (with SUP 3) | | Demand Side (with RET 3) | |
|---|---|---|---|
| **Techniques/Tools** | **Benefits/Value Created** | **Techniques/Tools** | **Benefits/Value Created** |
| **Practices**<br>• **Price negotiation** (A MAN 3-8, item i (a),ii; MAN 3-19, item i)<br>• **Use of approved suppliers** (A MAN 3-1, item i; MAN 3-4, item i)<br>• **Joint cost reduction approach** (A MAN 3-4, item iii; MAN 3-7, items ii (a), (b), (c); MAN 3-19, items ii, iii; MAN 3-28, items i, ii (a))<br>• **Quality focus** (A MAN 3-8, items i (b), ii) | ⇨ • **Cost reduction** (A MAN 3-21, item i)<br>• **Improved profitability** (A MAN 3-21, item i) | • **Target costing** (A MAN 3-6, item ii; C MAN 3-8, items i, ii)<br>**Practices**<br>• **Shared transport** (A MAN 3-17; MAN 3-22, item v; B MAN 3-24)<br>• **Use of customer-approved suppliers** (A MAN 3-22, items i, ii, iii) | ⇨ • **Cost reduction** (A MAN 3-24, item i)<br>• **Improved profitability** (A MAN 3-26, item ii) |

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**Table 7.44 RET 3: Summary of inter-company cost management and benefits/value created**

| | Supply Side (with MANU 3) | | Supply Side (with SUP 3[28]) | |
|---|---|---|---|---|
| **Supply Chain 3** | **Techniques/Tools**<br>• **Target costing** (G RET 3-5, (a) items i to vi)<br>• **Open book costing** (G RET 3-10, items i, ii)<br><br>**Practices**<br>• **Training and assistance** (G RET 3-5, (b) items i, ii, iii)<br>• **Delivery scheduling** (G RET 3-5, (c) item i; G RET 3-8)<br>• **Joint product design** (G RET 3-5, (d) items i, ii, iii)<br>• **Joint post product launch audit** (G RET 3-5, (e) item i)<br>• **Bulk buying** (G RET 3-5, (e) item ii, iii)<br>• **Strategy meetings** (G RET 3-5, (e) items iv, v)<br>• **Sharing of cost savings through margins** (G RET 3-6, items i, ii) | **Benefits/Value Created**<br>• **Gaining competitive edge** (G RET 3-11, item i)<br>• **Development of trust** (G RET 3-11, item ii)<br>• **Improved profitability** (G RET 3-11, item iii) | **Techniques/Tools**<br>•<br><br>**Practices**<br>• | **Benefits/Value Created** |

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[28] Apart from the initial approval of, and periodic quality assessment performed on SUP 3's products by RET 3, the companies do not have direct cost reduction involvement.

### 7.7.9 Cost management practices

Several practices are utilised at the interface between MANU 3 and RET 3 to support cost management, in conjunction with target costing as discussed above.

*Open book accounting/policy*

There is openness or transparency between MANU 3 and RET 3 in that both companies know each other's costs and margins. This information is shared during the product design phase and throughout the lifespan of a recipe. RET 3 gives MANU 3 a list of the selling prices of the products they trade with each other, plus information regarding its desired margin. MANU 3 is responsible for applying price tags to RET 3 products in its factories before the products are delivered to RET 3's distribution centre. Thus negotiations during the product development stage, between MANU 3 and RET 3's Buyers, involve the disclosure of all information pertaining to the costs and margins of each company. This practice supports target costing and enables the two companies to jointly initiate ways of reducing costs.

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*Joint product design*

In order to facilitate target costing and achieve meaningful cost reduction at the development stage of a product, MANU 3's PDC and RET 3's product development team work together in MANU 3's kitchens to come up with cost-effective recipes. Joint product design is seen as key to the realisation of cost reduction through target costing. RET 3's product development personnel are involved from the time a recipe is created (either by RET 3's product development department or MANU 3's PDC), right up to the time the product is handed over to MANU 3's production managers. Training and assistance is also offered to either company during the product development process. Knowledge and experiences are openly shared between the two teams, together with MANU 3's purchasing personnel who suggest alternative ingredients as part of the cost reduction process.

*Sharing of logistical facilities*

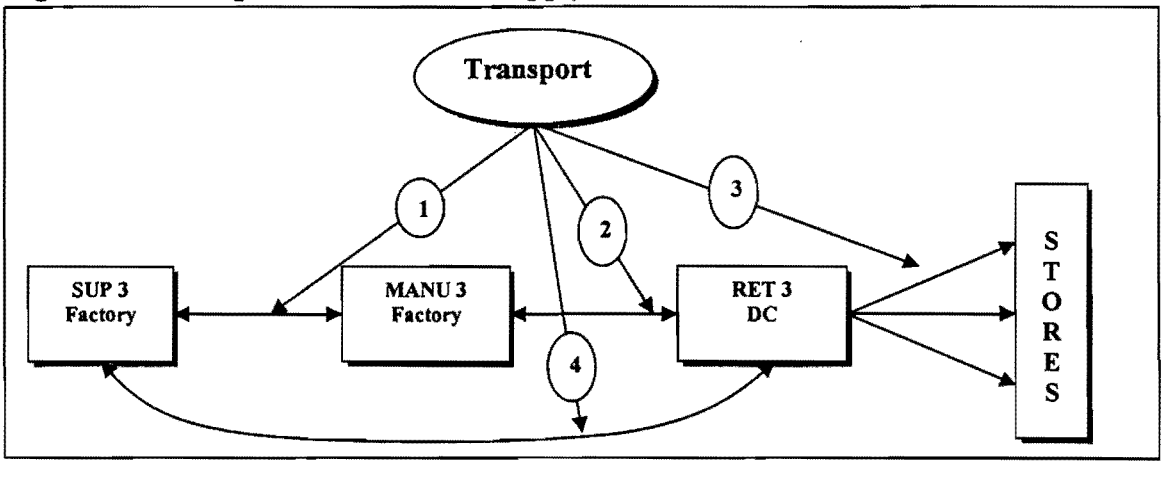
MANU 3 and RET 3 have a unique relationship in that MANU 3 does not have a logistical function of its own. The company uses RET 3's highly sophisticated logistical function that allows both companies to use the same transport for inputs and delivery of products, as shown in figure 22 below. The logistical facilities (transport) used within the supply chain is outsourced from a third party. The following is an example of how transport is shared.

A truck uplifts products from SUP 3, a Tier I supplier (of beef in this context). Two beef products are loaded, the first (item 1) constituting ingredients for MANU 3 used for the production of meals sold by RET 3. The second product is raw beef, for sale as such in RET 3 stores (item 4). The truck delivers the ingredient to MANU 3 (item 1), and then uplifts finished goods from MANU 3 for delivery to RET 3's distribution centre (item 2). Proceeding to RET 3's distribution centre (DC), the truck then offloads MANU 3's finished goods (item 2) and SUP 3's raw beef (item 4). Now empty, the truck is loaded with other finished products at RET 3 distribution centre, for delivery to selected RET 3 stores (item 3).

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This way, the RET 3's logistical function ensures that trucks are always carrying product (be it raw beef or finished product), resulting in an efficient utilisation of the trucks. Consequently, the cost of delivery is significantly reduced which further contributes to the achievement of cost targets for products sold to end-use customers. Furthermore, the configuration of the logistical processes facilitates reverse logistics, i.e. where products have to be returned from RET 3 stores due to quality and other problems.

**Figure 22 The logistical function in Supply Chain 3**



*Bulk buying*

Due the configuration of the logistical function within Supply Chain 3, RET 3 and MANU 3 achieve further cost savings through bulk-buying. RET 3's raw beef requirement for its stores is combined with MANU 3's beef requirements for its factories (items 1 and 4 in the diagram above) and a bulk order is sent to SUP 3. In this way, the two companies can negotiate a better deal with the supplier (in terms of price per kilogram of beef), i.e. they reduce costs through quantity discounts.

*Delivery scheduling*

Due to the highly perishable nature of the products which MANU 3 supplies to RET 3, and the need to minimise transport costs, the two companies engage in strict delivery schedules. MANU 3 (and other manufacturers) is expected to deliver their products to RET 3's DC at specific times. There is a fifteen minute window period between the arrival, offloading and departure of one truck and the arrival of the next.[29]. Each truck has a specific offloading bay (for products coming into the DC) and loading bay (for product leaving for RET 3's stores). These times are strictly adhered to ensure that a truck does not wait unnecessarily as this may result in rising food temperatures. (As this is a cold supply chain, maintaining temperatures within the recommended range is very important). Delivery scheduling between MANU 3 and RET 3 allows the truck turnaround time to be shorter than might other wise be the case, resulting in cost savings.

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*Strategy meetings*

RET 3 and MANU 3 hold strategy meetings which are largely influenced by RET 3's strategic thrust. The purpose of the strategy meetings is to enable MANU 3 to understand the nature of the products that will take RET 3's business into the future and to map out product strategies based on that understanding. These meetings are held once every six months and then supported by monthly and weekly meetings between the two companies, during which the progress towards the achievement of the broad objectives as set out in the strategy meetings is reviewed. This form of interaction also means that MANU 3 is in a position to initiate investment projects (such as the factory currently under construction

[29] The researcher spent 4 hours at RET 3 DC observing how and when trucks come into specific offloading and loading bays in order to understand how the delivery scheduling is implemented.

that will deal with new business such as pizzas and quiche). The sharing of strategic information supports and is supported by the open book policy already discussed. These meetings also create a platform on which major problems are discussed, and solutions suggested. The key issue is to be on the same wave-length so that investment in equipment, plant and machinery, and personnel is made in accordance with the agreed strategy. MANU 3 and RET 3 also discuss, on an ongoing basis, the possible use of shared resources (such as the logistical examples discussed earlier). These discussions aim to eliminate the duplication of activities/processes, which would in turn result in further cost savings.

*Customer-approved suppliers*

All suppliers that deal with MANU 3 are initially approved by RET 3 on the basis of measures such as quality, reliability (in terms of capacity to produce inputs and on-time delivery), as well as ethical standards. Ethical standards focus on environmental and labour laws compliance. This practice enables MANU 3 to source from suppliers that satisfy RET 3's quality specifications, resulting in the reduction of returns arising from poor quality inputs and failure to comply with environmental and labour laws.

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*Sharing of cost savings*

MANU 3 and its customer RET 3, share most of the cost savings via the adjustment of their respective margins. This is seen as a fair way of sharing benefits from their joint efforts in cost management, as consensus is created by negotiation. Cost savings are also passed on to end-use customers through lower prices. Either way, the companies are likely to benefit in that lower selling prices may induce high sales volumes, resulting in more profits.

*Benefits/value created*

Value is created through the joint cost management efforts discussed above, and takes the form of an improved competitive position (through lower costs and high quality products), the development of trust, and improved profitability (which arises from the combination of low cost and high quality product, and an improved competitive position).

### 7.8 RET 3's Intra-company cost management

Within RET 3, budgetary control (supported by monthly management reports) and the balanced scorecard are techniques that are used to manage costs. In addition to these techniques, the company focuses on managing its margins. Table 45 on page 218 below gives a summary RET 3's the intra-company cost management techniques and practices

#### 7.8.1 Cost management techniques/tools

*Budgetary control*

Budgetary control enables the company to manage the cost of food items that it buys from about 500 different suppliers, as well as the cost of running its various departments. From the budgeted purchases, for example, cost targets for food items are determined. Consequently, RET 3 will advise MANU 3 of its budgeted spend, per food category, for a given season. RET 3 buyers must then ensure that their purchases do not exceed the budget. The Supply Chain Manager of RET 3 put it this way:

> "For instance we can say to MANU 3 'this winter on the soup range we are going to spend R50 million.'" (RET $^{3-4}$, (a) item i).

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The budgetary control system is complemented by the generation of monthly management accounts by the Finance department. The monthly management reports provide feedback to employees by highlighting areas where they are failing to attain budgeted targets.

*Balanced scorecard (BSC)*

The balanced scorecard is a corporate initiative that is being implemented in divisions within the African Retailers Group. This tool is not yet well developed within the RET 3 division. At present, the focus of the BSC is on suppliers, i.e. giving more responsibility to suppliers to develop innovative products that will fit into RET 3's product portfolio, and which are in line with the company's strategic intent. As such, category managers within RET 3 are expected to work closely with manufacturers like MANU 3 to ensure that a greater number of viable product designs originate from them. Thus one of the key performance indicators used to evaluate category managers is supplier innovation.

### 7.8.2 Cost management practices

*Focus on margins*

Margin management is a key factor in RET 3's quest to achieve its cost and profit targets. Consequently, a lot of emphasis is placed on the ability of Buyers to meet their budgeted margins. The achievement of budgeted margins impacts heavily on the company's cost target setting, and on the ability of MANU 3 to negotiate a reduction in RET 3's margins where cost targets have not been met. The following quote from the Supply Chain Manager of RET 3 summarises the importance of margin maintenance:

> "Our focus is on the cost of products that we buy because our main concern is centred on margins. Margin rules; within RET 3 there is not negotiation about margins; if you are a Buyer, you come in on your margin and that margin is set." (G $^{RET\ 3\text{-}12}$, item i).

This practice implies that most of the cost reduction opportunities (in pursuit of target costs) lie in the ability of MANU 3 (and RET 3, where applicable) to negotiate with its ingredient and packaging suppliers. MANU 3 will also examine its own internal processes (e.g. recipe formulation) in order to further reduce costs.

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*Team-based approach*

Cost management within RET 3 is based on teams, each with responsibility for a specific product category. Each category manager and his/her subordinates are responsible for achieving cost reductions as set out in the company's budgets.

### 7.8.3 Supply side

The supply side of Supply Chain 3 involves MANU 3 and its key supplier (SUP 3), who supplies beef products such as steak and mince meat. Cost management between MANU 3 and SUP 3 is driven by the use of target costing, which is in turn facilitated by a number of other practices such as price negotiation, training and assistance, open book accounting, delivery scheduling, joint product design, quality focus and the sharing of cost savings through margins. Table 7.46 on page 220 gives a summary of these cost management techniques and practices (on SUP 3's side) and Table 7.43 on page 211 (on MANU 3's side) applied co-operatively between MANU 3 and SUP 3.

**Table 7.45 RET 3: Summary of intra-company cost management and the benefits/value created**

| Supply Chain 3 | | |
|---|---|---|
| | **Techniques/Tools**<br>• **Budgetary control** (G RET 3-16, item i)<br>• **Balanced scorecard** (G RET 3-16, item ii)<br><br>**Practices**<br>• **Focus on margins** (G RET 3-12, item i)<br>• **Team-based approach** (G RET 3-15) | **Benefits/Value Created**<br>⇨ • **Cost reduction** (G RET 3-12, items i, ii) |

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**Table 7.46 SUP 3: Summary of inter-company cost management and the benefits/value created**

| | Supply Side (with key Suppliers) | | Demand Side (with MANU 3) | |
|---|---|---|---|---|
| **Supply Chain 3** | **Techniques/Tools**<br>• **Target costing** ($F^{SUP\ 3-16}$, item iii)<br>• **Benchmarking** ($F^{SUP\ 3-22}$, item i)<br><br>**Practices**<br>• **Price negotiation** ($F^{SUP\ 3-16}$, item ii)<br>• **Quality focus** ($F^{SUP\ 3-16}$, item iv)<br>• **Delivery scheduling** ($F^{SUP\ 3-16}$, items v, vi) | **Benefits/Value Created**<br>• **Consistent supply** ($F^{SUP\ 3-18}$, item i)<br>• **Cost reduction** ($F^{SUP\ 3-18}$, items ii, iii)<br>• **Improved bottom line** ($F^{SUP\ 3-18}$, item iv) | **Techniques/Tools**<br>• **Target costing** ($F^{SUP\ 3-5}$, (a) items i, ii)<br><br>**Practices**<br>• **Training and assistance** ($F^{SUP\ 3-5}$, (b) )<br>• **Open book costing** ($F^{SUP\ 3-5}$, (a) item ii)<br>• **Delivery scheduling** ($F^{SUP\ 3-5}$, (c) )<br>• **Joint product design** ($F^{SUP\ 3-5}$, (d) items i, ii)<br>• **Regular meetings** ($F^{SUP\ 3-5}$, (e) item i)<br>• **Sharing of cost savings through margins** ($F^{SUP\ 3-6}$) | **Benefits/Value Created**<br>• **Development of trust** ($F^{SUP\ 3-5}$, (e) item iii $_{(b)}$ )<br>• **Cost reduction** ($F^{SUP\ 3-5}$, (e) items ii, iii; $^{SUP\ 3-10}$, items i, ii ) |

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### 7.8.4 Cost management techniques/tools

*Target costing*

Target costing is a technique which is applied along the supply chain, based on the cost targets set for MANU 3 by its customer RET 3. MANU 3 then sets its own targets which SUP 3 is expected to meet, in terms of cost per kilogram of beef. These cost targets are negotiated between MANU 3 and SUP 3, taking into account SUP 3's costs and the price pressures which MANU 3 faces. Thus price negotiation is an important part of the process of arriving at target costs along the supply chain.

### 7.8.5 Cost management practices

*Quality focus*

Quality is monitored and maintained throughout the supply chain due to the fact that products produced from SUP 3's ingredients are RET 3 branded. As such, quality standards are maintained through inter-company training as discussed earlier, as well as SUP 3's own internal quality management focus. For SUP 3, the high quality products that it sells (triple 'A' grade), result in better prices and fewer returns from MANU 3. On MANU 3's side, the higher the quality of its ingredients, the better the ingredient yields, (and cost savings), and the better the quality of its final products. This in turn means fewer returns from its customer (and less waste).

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*Training and assistance*

Training and assistance is part of a close relationship that MANU 3 has with SUP 3. The two companies help each other in areas where they find the other competent. For example, MANU 3 excels in hygiene standards as already explained earlier under MANU 3's intra-cost management. That knowledge and expertise is passed on to SUP 3 to assist it with maintaining high standards as required by RET 3. Given the fact that periodically RET 3 evaluates the ability of each of MANU 3's suppliers (and other suppliers) to continue supplying high quality products in a clean environment, this training is very important for SUP 3. MANU 3 also gets training from SUP 3 on the best way of getting

the maximum yield from the ingredients that SUP 3 supplies. In both cases, the companies benefit from a cost reduction point of view, SUP 3 getting tried and tested methods of maintaining hygiene standards and MANU 3 savings costs through waste reduction.

*Delivery scheduling*

MANU 3 has standing orders that SUP 3 is always fully aware of, i.e. MANU 3 came up with delivery schedules that the two companies have been following for the past six years. These are based on the normal lead times on SUP 3's side as well as on the delivery schedules that apply between MANU 3 and RET 3. Cost reduction is achieved on both sides in that SUP 3 can carefully plan the processing of meat and be ready when the trucks come to collect the ingredients. On MANU 3's side, delays in the factories are eliminated, given the severity of failure to deliver to RET 3's DC as expected. The production manager of MANU 3 put it this way:

> "Our key competitive issue with regard to production is that we are producing products that have a short shelf life, i.e. perishable goods. We get our orders (from RET 3) on the day or a day before delivery. All the production we do, we start from scratch in the morning and we have to deliver in the evening. Thus because we are in the fast consumer goods environment, we have to deal with short lead times and flexibility in production." (C $^{MAN\ 3\text{-}1}$)

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The purchasing manager of MANU 3 also supported this view of the importance of sticking to the delivery schedules by say that:

> "The specific issues [with regard to key competitive advantage] lie in the availability of ingredients on time since our factories cannot wait for even 30 minutes for ingredients to arrive and still meet the delivery time required by our customer." (A $^{MAN\ 3\text{-}1}$, item iii)

Thus SUP 3 is required to deliver ingredients on Mondays, Wednesday s and Fridays before 10 am. MANU 3 places orders two days in advance to allow SUP 3 time to process the beef ingredients.

*Open book accounting*

MANU 3 fully understands SUP 3 costs through the relationship that they have had over the years. However, this practice does not appear to be a two-way process because SUP 3

does not fully understand MANU 3's costs apart from the beef products traded between the two companies.

*Joint product design*

SUP 3 is involved (as shown earlier in the diagram with the key processes along this supply chain) in new product design. This is achieved by involving SUP 3 as soon as a recipe is created and SUP 3's contribution is in terms of the best products it can supply to enable MANU 3 to achieve its desired product characteristics. Joint product design is supported by regular meetings held between SUP 3 and MANU 3 to discuss new products (new recipes).

*Sharing of cost savings*

Cost savings achieved through the application of inter-company cost management techniques and practices are shared through margin adjustment. Thus both companies benefit from the joint cost management approach.

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*Benefits/value created*

The relationship between MANU 3 and SUP 3 and the cost management efforts between them result in cost reduction, improved profitability and the development of trust.

### 7.8.6 SUP 3's Intra-company cost management

SUP 3's cost management involves budgetary control (supported by variance analysis) and practices such as quality focus and team-based approach, (see Table 7.47 on page 225).

### 7.8.7 Cost management techniques/tools

*Budgetary control*

SUP 3 uses budgets to manage the cost of labour, inputs (beef and packaging) and waste. The company knows the expected output from each block of beef and this is compared to the actual to show waste levels as well as efficiency in the process of cutting meat.

Budgets for beef inputs are supported by what the company calls 'Block Test' as explained by the production manager.

> "Our main tool is called the Block Test. We know the standard output from each block of meat, e.g. the kilograms of mince meat, sausages and shin that are expected from a block of meat. We then compare the actual output against the standard output and the difference reflects waste or efficiency levels in the processing of the block of meat. This tool enables us to reduce costs by focusing on areas where there is waste." ($F^{SUP\ 3\text{-}15}$, items i, ii). (Refer to $F^{SUP\ 3\text{-}15}$, item iii for more details).

### 7.8.8 Cost management practices

*Quality focus*

Quality focus is very important because SUP 3 deals with highly a perishable product – beef. The company also serves a market that requires the beef products in strict specifications, for example, the size of mince meat and the fat-to-meat ratio. Thus SUP 3's quality focus addresses quality-related problems arising from the strict specifications as well as perishability issues by (1) training factory personnel and (2) on-time processing of beef. The first measure ensures that the beef products (mince, sausages and steak) satisfy customer requirements, thus avoiding returns. The second approach is meant to avoid costs related to beef going bad before it has been processed. The production manager explained how important customers' specifications are in the company's cost management process as follows:

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> "The meat industry is a very technical one. .....If we do not cut the meat according to our customer's specifications, then we have problems, i.e. they return the meat to us. We make sure that where we are required to use a 13mm blade, we do exactly that, and not use a 5mm blade. The correct meat-to-fat ratio is also important. We have to make sure that the mix is right, otherwise our customers will not accept, say too much fat or too little."($F^{SUP\ 4\text{-}11}$, items i, ii, iii).

With regard to the management of costs arising from the perishability of beef, the production manager explained as follows.

> "We also give a lot of attention to the efficiency of our factory personnel. Meat is highly perishable, hence we have to make sure that we work on the meat that we have in the factory within the right time (as short as possible)." ($F^{SUP\ 4\text{-}11}$, item iv).

**Table 7.47 SUP 3: Summary of intra-company cost management and the benefits/value created**

| | | |
|---|---|---|
| **Supply Chain 3** | **Techniques/Tools**<br>• **Budgetary control** ($F^{SUP\ 3\text{-}12}$, item i; $^{SUP\ 3\text{-}15}$, item v)<br>• **Variance analysis/Block Test** ($F^{SUP\ 3\text{-}12}$, item ii; $^{SUP\ 3\text{-}15}$, items i, ii, iii)<br><br>**Practices**<br>• **Quality focus** ($F^{SUP\ 3\text{-}11}$, items ii, iii, iv)<br>• **Team-based cost management** ($F^{SUP\ 3\text{-}14}$) | ⇨ • **Cost reduction** ($F^{SUP\ 3\text{-}15}$, items ii, iv) |

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*Team-based approach*

Cost management within SUP 3 is a team-based effort that draws personnel from purchasing finance, production and sales together, to focus on areas of concern, as shown the monthly management reports that are produced by the finance department. Issues such as on-time delivery of beef into the factory, on-time processing of the beef into beef products and the adherence to customer specifications in the factory are discussed. Thus the team works in a way that reflects the understanding the work of each function (e.g. timely orders by the purchasing department) affects the ability of the other departments to meet their expected performance (e.g. the on-time processing of beef products by the production department).

*Benefits/Value created*

The value created by SUP 3's intra-company cost management techniques and practices is interpreted in form of cost reduction. These cost savings are reported on a weekly basis.

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**7.8.9 Conclusion**

Value in Supply Chain 3 is created by the application of techniques such as target costing, budgetary control and variance analysis. Practices that are commonly used along this supply chain include price negotiation, quality focus, delivery scheduling, intra- and inter-company multi-functional teams, training and assistance, continuous improvement, joint product design, open book policy, management of product mix, strategy meetings, bulk-buying and sharing of cost savings. Table 7.48 on page 227 below classifies both the intra-company and inter-company cost management techniques/tools and practices in three categories, namely traditional management accounting, advanced management accounting and a category that is neither of the two.

The value created by intra-company cost management techniques and practices is expressed in terms of cost reduction and operational efficiency. Inter-company cost management techniques and practices create value that is interpreted as cost reductions,

improved profitability, the development of trust and the achievement of a competitive advantage against competitors.

**Table 7.48 Supply Chain 3 Classification of cost management techniques & practices**

| | Traditional management accounting | Advanced management accounting | Other |
|---|---|---|---|
| **Technique/ tool** | Budgetary control<br>Variance analysis | Target costing<br>Continuous improvement (Kaizen)<br>Balanced scorecard | |
| **Practice** | | Open book policy | Price negotiation<br>Delivery scheduling<br>Training & assistance<br>Joint product design<br>Quality focus<br>Intra-company teams<br>Inter-company teams<br>Sharing of cost savings<br>Strategy meetings<br>Management of product mix<br>Bulk buying |

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## 7.9 OVERALL SUMMARY

The cost management techniques and practices presented in this chapter indicate that, based on the case studies in supply chains 1 to 3, there is very little use of the advanced management accounting practices. Advanced management accounting techniques that are commonly used are target costing and continuous improvement (some form of Kaizen costing). The other advanced management accounting technique in use is the balanced score card (though only in one supply chain and not that developed in the other). Most of the other techniques that are commonly used across all three supply chains are traditional management accounting techniques such as budgetary control, supported by variance analysis.

Practices that are seen as supporting strategic cost management commonly in use are team-based approach (both intra- and inter-company), open book policy (with varying degrees of 'openness'), joint product design, sharing of cost savings, sharing of information (through meetings involving inter-company teams), quality focus, and training and assistance. The majority of the practices in use across the three supply chains, (such as price negotiation, delivery scheduling forward cover, bulk-buying) are not the domain of either traditional or management accounting practices. The way the supply chains studied are applying strategic cost management (through the techniques and practices presented in this chapter) and the possible reasons thereof, are the subjects of the next chapter.

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# CHAPTER EIGHT

## ANALYSIS OF RESEARCH RESULTS

### 8.0 Introduction

This chapter presents an analysis of the case study findings presented in chapter seven, and answers research questions 8 to 12 as posed at the end of the literature review. In the earlier chapters, a number of case studies were presented. All of the case studies sought to establish the extent to which strategic cost management is being applied to support value creation along the supply chain. The approach taken for the analysis of the results is discussed below.

#### 8.1 Analysis of case studies

In the analysis of the case studies carried out, the principal unit of analysis in this research is the entire supply chain, i.e. supply chains 1, 2 and 3. This was seen as the appropriate approach because a unit of analysis ".... must be sensitive to the particularities of the investigation objective and remain coherent to the theoretical framework ..... [and] it should ease as much as possible comparisons with similar studies," (Nieto and Perez, 2000; p. 726). This research was undertaken to establish how strategic cost management is being applied along supply chains within the South African retail industry to aid the process of value creation. Therefore each supply chain is in each case regarded as the principal unit of analysis in order to retain sensitivity to the particularities of the investigation. Also, each supply chain is a coherent unit that facilitates comparisons with other supply chain studies.

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The intermediate unit of analysis is each company making up the supply chains studied, as each is seen as the "natural field of a combination of factors [techniques/tools and practices in each function or multidisciplinary area] which are specific, as well as related to the principal unit (Nieto and Perez, 2000; p. 726). The analysis of the case studies follows a pattern of behaviour strategy as suggested by Nieto and Perez, (2000) in that it involves (1) the comparison of the cost management techniques and practices applied along each of the three supply chains studied, in line with the research questions 10 to 12, and (2) the comparison of these cost

management approaches against the theoretical framework developed in the literature section of the thesis. In the second part of the analysis, the theoretical framework developed at the end of literature review is used as a template with which to compare the empirical results of the case studies (Rowley, 2002). Thus the analysis starts by answering the research questions as follows.

### 8.2 Sub-problems 8 and 9

8. *What are the definitions of value associated with the supply chain management practices in the South African retail industry?*
9. *How is the value associated with these supply chain management practices created?*

The results from the supply chains studied show that value along a product's supply chain is being defined in terms of cost reductions and internal operational efficiency, resulting in improved profitability and company growth. Value is also assuming a non-financial dimension, in that it includes the development of trust between supply chain participants and the attainment of a competitive advantage. Table 8.49 below summarises how value is being defined along the supply chains studied, showing the distinction between value created through the support of intra-company techniques and practices and inter-company techniques and practices.

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**Table 8.49 Summary of value according to its source**

| | Source | |
|---|---|---|
| Supply Chain | Intra-company techniques & practices | Inter-company techniques & practices |
| 1 | Cost reduction<br>Operational efficiency<br>Improved profitability | Cost reduction<br>Improved profitability<br>Company growth<br>Development of trust |
| 2 | Cost reduction<br>Operational efficiency<br>Improved profitability | Cost reduction<br>Improved profitability<br>Company growth<br>Long-term trust-based relationship |
| 3 | Cost reduction<br>Operational efficiency<br>Improved profitability | Cost reduction<br>Improved profitability<br>Development of trust<br>Attainment of competitive advantage |

### 8.2.1 *Supply chain 1*

As shown in Table 8.49 above, cost reductions that lead to improved profitability are created by both the intra-company and inter-company cost management techniques and practices. Operational efficiency however, is the result of the application of intra-company cost management practices such as efficient factory layout. Company growth and the development of trust are the results of the application of inter-company cost management techniques and practices. Thus, from the supply chain 1 details, value that is non-financial (i.e. interpreted as the development of trust) is limited to the application of inter-company techniques and practices.

### 8.2.2 *Supply chain 2*

The analysis of supply chain 2 shows that value is seen as cost reductions, operational efficiency, improved profitability, the development of a long-term trust-based relationship and company growth. Cost reductions that result in improved profitability are realised through the application of both intra- and inter-company cost management techniques and practices. Operational efficiency is realised through the application of intra-company techniques and practices. Value that is generated by, and restricted to, the application of inter-company cost management techniques and practices is seen as the development of trust and company growth.

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### 8.3.3 *Supply Chain 3*

In supply chain 3, value is defined in terms of cost reductions, operational efficiency, improved profitability, the development of trust and the attainment of competitive advantage against competitors. The application of both intra- and inter-company techniques and practices result in cost reductions, while operational efficiency is limited to intra-company techniques and practices. Improved profitability, the development of trust and the attainment of a competitive advantage are the result of the application of inter-company techniques and practices.

### 8.2.4 Analysis

Using the pattern of behaviour strategy (Nieto and Perez, 2000), the results from all three supply chains generally reveal the same evidence. Value created through intra-company cost management techniques and practices is seen as cost reductions and operational efficiency, resulting in improved profitability. The nature of this value is

consistent with the value as defined in the theoretical propositions (as discussed in chapter 3; refer to figure 3 on page 52).

Results from all three supply chains also show that the application of inter-company cost management techniques and practices produces value in terms of cost reductions, improved profitability, company growth and the development of trust. Thus in all three supply chains, the application of inter-company cost management techniques and practices results in the creation of value that is (1) quantifiable (cost reductions, improved profitability and company growth[29]) and (2) non-quantifiable (the development of trust). Therefore, from the cases studies, it appears that intangible value (trust) requires the application of inter-company cost management techniques and practices. These inter-company cost management techniques and practices create synergistic value (Leobecke *et al*, 1999) through the exploitation of knowledge that resides in the companies along each supply chain. Taking a resource-based view (Wernerfelt, 1989; Grant, 1991; Barney, 1996), trust is seen as a 'cultural resource' with unlimited long-run capacity to generate value. This type of value is seen as arising from team effects (Wernerfelt, 1989) such as intra- and inter-company teams (Cullen *et al*, 1999) utilised in joint product designs, training and assistance and inter-company meetings in all three of the supply chains studied. Trust is also enhanced by (and reciprocally enhances) open book practices (Cullen *et al*, 1999) in that, sharing confidential cost information, signals the belief that an exchange partner would not act in self interest at another's expense (Uzzi, 1997).

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### 8.3 Sub-problem 10

*Which management accounting techniques and practices are being applied along the supply chains in the South African retail industry?*

Table 8.50 below summarises the cost management techniques and practices applied along all three of the supply chains studied. The techniques and practices are shown according to whether they support traditional management accounting or strategic cost management, as suggested in the literature.

[29]The case study approach used is descriptive in nature, hence there was no attempt made to quantify the values created (cost reductions, improved profitability and company growth). Therefore establishing a causal relationship between the values created and the particular cost management techniques and practices, was not considered relevant to the study.

consistent with the value as defined in the theoretical propositions (as discussed in chapter 3; refer to figure 2 on page 50).

Results from all three supply chains also show that the application of inter-company cost management techniques and practices produces value in terms of cost reductions, improved profitability, company growth and the development of trust. Thus in all three supply chains, the application of inter-company cost management techniques and practices results in the creation of value that is (1) quantifiable (cost reductions, improved profitability and company growth[29]) and (2) non-quantifiable (the development of trust). Therefore, from the cases studies, it appears that intangible value (trust) requires the application of inter-company cost management techniques and practices. These inter-company cost management techniques and practices create synergistic value (Leobecke *et al*, 1999) through the exploitation of knowledge that resides in the companies along each supply chain. Taking a resource-based view (Wernerfelt, 1989; Grant, 1991; Barney, 1996), trust is seen as a 'cultural resource' with unlimited long-run capacity to generate value. This type of value is seen as arising from team effects (Wernerfelt, 1989) such as intra- and inter-company teams (Cullen *et al*, 1999) utilised in joint product designs, training and assistance and inter-company meetings in all three of the supply chains studied. Trust is also enhanced by (and reciprocally enhances) open book practices (Cullen *et al*, 1999) in that, sharing confidential cost information, signals the belief that an exchange partner would not act in self interest at another's expense (Uzzi, 1997).

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*Which management accounting techniques and practices are being applied along the supply chains in the South African retail industry?*

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**Table 8.50 The application of cost management techniques and practices along supply chain components**

| Supply Chain | | | Supplier | | Manufacturer | | Retailer | |
|---|---|---|---|---|---|---|---|---|
| | | | Technique/tool | Practice | Technique/tool | Practice | Technique/tool | Practice |
| | 1 | Traditional | Budgetary control<br>Variance analysis | | Budgetary control<br>Variance analysis | | Budgetary control<br>Variance analysis | |
| | | Strategic cost mgt. | TQM<br>Benchmarking | Training & assistance<br>Product delivery scheduling<br>Sharing of cost savings | Target costing<br>Continuous improvement<br>Benchmarking<br>RTMs analysis<br>Forward cover<br>EDI | Quality focus<br>Team-based approach<br>Strategy meetings<br>Training & assistance<br>Delivery scheduling<br>Sharing of cost savings<br>Joint product design<br>Customer-approved suppliers<br>Price negotiation | Target costing<br>Balanced scorecard<br>EDI | Quality focus<br>Team-based approach<br>Strategy meetings<br>Training & assistance<br>Delivery scheduling<br>Sharing of cost savings<br>Joint product design |
| | 2 | Traditional | Budgetary control<br>Profitability analysis | | Budgetary control<br>Variance analysis | Bulk-buying | Budgetary control<br>Variance analysis | |
| | | Strategic cost mgt. | Target costing | Quality focus<br>Team-based approach<br>Training & assistance<br>Delivery scheduling<br>Joint product design<br>Supplier association<br>Vendor-managed inventory<br>Sharing of cost savings<br>Open book policy | Target costing<br>Continuous improvement<br>Benchmarking | Quality focus<br>Team-based approach<br>Strategy meetings<br>Training & assistance<br>Delivery scheduling<br>Joint product design<br>Collaborative stock planning<br>Inter-company investments<br>Price negotiation | Target costing | Quality focus<br>Team-based approach<br>Strategy meetings<br>Training & assistance<br>Delivery scheduling<br>Joint product design<br>Open book policy |
| | 3 | Traditional | Budgetary control<br>Variance analysis | | Budgetary control<br>Variance analysis | | Budgetary control<br>Variance analysis | Bulk-buying |
| | | Strategic cost mgt. | Target costing | Quality focus<br>Team-based approach<br>Training & assistance<br>Delivery scheduling<br>Joint product design<br>Sharing of cost savings<br>Open book policy | Target costing | Quality focus<br>Team-based approach<br>Strategy meetings<br>Shared transport<br>Customer-approved suppliers<br>Price negotiation | Target costing<br>Balanced scorecard | Quality focus<br>Team-based approach<br>Strategy meetings<br>Training & assistance<br>Delivery scheduling<br>Joint product design<br>Sharing of cost savings |

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### 8.3.1 *Supply Chain 1*

Techniques that support traditional management accounting that are applied along supply chain 1 are budgetary control and variance analysis. These techniques are by their very nature, intra-company, i.e. they do not span organisational boundaries. Cost management techniques that support strategic cost management along supply chain 1 are target costing, continuous improvement, benchmarking, RTMs analysis, forward cover, the balanced scorecard and total quality management. These techniques, except forward cover, are applied at the interface between the trading partners within the supply chain, i.e. they are inter-company techniques. Most of the inter-company cost management techniques are initiated by the manufacturer and concentrated on the demand side of the supply chain.

Cost management in supply chain 1 is largely achieved by the application of practices such as quality focus, team-based approach (both intra- and inter-company), strategy meetings, delivery scheduling, training and assistance, joint product design, and the sharing of cost savings. Most of these practices are applied between the manufacturer and the retailer (this is in line with the high number of activities between the two companies compared to the level of interaction between the manufacturer and the supplier). Thus it is apparent from table 8.50 that cost management along supply chain 1 is largely achieved through the application of practices rather than techniques. Also, there is a fair amount of advanced management accounting techniques applied along the supply chain (i.e. target costing, continuous improvement, the balanced scorecard, TQM and benchmarking). RTMs analysis could be categorised as strategic management accounting, on the basis of the first economic perspective of strategic management accounting, according to Bromwich and Bhimani (1989). This perspective focuses on the product's attributes, and the role of the management accountant is to extend cost analysis beyond the company boundary. This in essence is the purpose of RTMs analysis, with a strong emphasis on quality-of-garments attributes. Price negotiation with fabric and trim suppliers is used to achieve lower input costs, so as to enable the manufacturer to attain cost targets set by the retailer. This practice is thus used in the context of target costing.

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### 8.3.2 *Supply Chain 2*

In supply chain 2, the dominant intra-company techniques used are budgetary control and variance analysis, both of which support traditional management accounting. Techniques that support strategic cost management are target costing, continuous improvement and benchmarking, all of which also span organisational boundaries. Most of these cost management techniques are at the manufacturer's end of the supply chain, with an emphasis on the supply side. This is due to the nature of supply chain 2, which involves the production of garments by a CMT supplier (the production of garments is done by SUP 2, as discussed in chapter 7).

The cost management effort in supply chain 2 is largely achieved through the application of practices such as quality focus, team-based approach (both intra- and inter-company), training and assistance, delivery scheduling, joint product design, open book policy, sharing of cost savings and strategy meetings. Other practices applied include vendor-managed inventory, inter-company investments (between supplier and manufacturer) and collaborative stock planning (between manufacturer and retailer).The information presented in Table 8.50 on page 233 shows that not many advanced management accounting techniques are in use along supply chain 2 (apart from target costing, continuous improvement and benchmarking). Bulk-buying at the manufacturer's end of the supply chain is seen as supporting traditional management accounting (according to literature) due to the focus on volume rather than other cost drivers. Price negotiation supports target costing in that, during the re-engineering of garments, when the actual garment cost exceeds the cost targets, the manufacturer negotiates lower input costs with fabric and trim suppliers.

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### 8.3.3 *Supply Chain 3*

Budgetary control and variance analysis are the dominant traditional management accounting techniques applied in intra-company cost control. Target costing is applied throughout the supply chain, together with the balanced scorecard (which is not yet well developed). These are the only advanced management accounting techniques that support strategic cost management.

The application of cost management practices is the dominant approach to cost management along supply chain 3. Quality focus, team-based approach (both intra-

and inter-company techniques), training and assistance, delivery scheduling, joint product design, strategy meetings (between manufacturer and retailer), shared transport, open book policy (between manufacturer and supplier), customer approved suppliers and sharing of cost savings exemplify the main practices in use. Also, price negotiation with ingredient and packaging suppliers is an important practice aimed at assisting the supplier to achieve cost targets set by the retailer.

### 8.3.4 Analysis

The discussion above shows that (1) budgetary control and variance analysis are common in all three the supply chains, (2) advanced management accounting techniques are not widely applied, particularly in supply chains two and three, (3) target costing is the most common inter-company cost management technique applied in all three supply chains (4) continuous improvement is commonly applied at the manufacturer's end of the supply chain (supply chains 1 and 2) and (5) cost management along the three supply chains appears to be achieved largely through the application of practices rather than techniques.

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There appears to be no wide-spread application of advanced management accounting techniques (as defined in the management accounting literature) to support strategic cost management along the supply chains, as literature suggests should be the case. There is several possible reasons for this. It has been documented that, in practice, more and more companies are considering the implementation of these advanced management accounting techniques, *but* there is little evidence to indicate that these techniques, have in fact, been widely implemented, (Drury *et* al, 1993; Drury and Tayles, 1995; Scapens, 1999). Drury *et al*, (1993) reported that only 4 % of the companies surveyed in the UK used ABC, and also showed that most organisations had not made significant progress towards the use of advanced management accounting techniques. Citing Green and Amenkhienan, (1992), Bright *et al*, (1992) and Ask and Ax, (1992), Drury and Tayles, (1995) argue that research done in the UK, USA and Sweden support the conclusion that advanced management accounting techniques have not been widely adopted in practice. Green and Amenkhienan, (1992) in USA conclude that:

> A significant lag still exists between innovations in manufacturing and innovations in management accounting. Although changes are taking place, firms to a large extent, continue to rely on outmoded accounting methods.

Bright *et al*, (1992) in the UK reached a similar conclusion and stated that many manufacturers are still actively working on introducing and developing what many observers might perceive to be traditional costing methods. In Sweden, Ask and Ax, (1992) also concluded that there is little evidence that ABC or other new techniques have been adopted by Swedish companies.

From the above research conclusions, it appears that advanced management accounting techniques may not have had a significant impact on management accounting practices in general and value creation along supply chains in particular. One of the reasons given for the apparent inertia in implementing change in management accounting practices is the cost-benefit approach that companies use in assessing whether they should adopt advanced management accounting techniques like ABC, (Drury and Tayles, 1995). Companies continue to use traditional management accounting where the perceived benefits of investing in new systems are considered less than the concomitant costs. Citing Bromwich and Bhimani, (1994), Drury and Tayles, (1995) argue that there is significant pressure placed on management accountants to produce monthly profit statements, which leaves them with little time to work with managers, devising new systems, reforming existing systems or even thinking critically about accounting issues, (p. 277).

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In the context of the supply chains studied in the South African retail industry, the explanation could lie with the management accounting practices which prevail in developing countries. A survey of South African companies by Horngren *et al* (1999) revealed that only 14 percent of the interviewed businesses had implemented activity-based costing, while another 15 percent were considering implementing it. In the same survey, the researchers report that 75 percent of companies that responded use standard costs in their accounting system. The two most important reasons for the use of standards was cost management, followed by budgetary planning and control. A recent survey by Waweru (2002) revealed that there is a low adoption rate of just-in-time inventory systems due to the inadequacy of supply chains in South Africa.

Furthermore, Waweru (2002) reported that, although most of the management accounting practices appearing in literature are being used to some degree in South African companies, only larger companies appear to have the capacity (resources) to implement advanced management accounting techniques such as ABC and BSC. This observation appears to explain the non-existence of ABC and BSC at the manufacturer's and Tier 1 sections of the supply chains. These companies are much smaller than retailers such as RET 1 and RET 3, who appear to have the capacity to introduce advanced management accounting techniques such as BSC and ABC.

The wide-spread use of target costing could be explained by relating the case study findings to the survey findings. One of the findings of the survey is that the price of a product is one of the sources of a form's competitive advantage, among other factors such as quality and differentiation. As such, target costing plays a pivotal role in achieving the cost target set by retailers in their effort to meet price pressures in the market. In order to complement target costing, continuous improvement and price negotiation are also applied, especially at the manufacturer's[30] end of the supply chain. This occurs during product manufacture, to support the attainment of target costs.

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Also, there appears to be a link between the widespread use of cost management practices in the three supply chains and the supply chain management practices as revealed by the findings of the survey. The survey results revealed that the supply chains within the South African retail industry are in transition, having moved from level one and being now concentrated in level two, and in some cases, exhibiting characteristics of supply chain levels three and four. Examples of some of the supply chain levels three and four characteristics are mutual trust, joint problem solving and the sharing of information (by way of strategy meetings, for instance)[31]. Therefore, companies along the supply chains studied are expected to be changing behaviourally

[30] It should be remembered that an assumption was made earlier in Chapter Seven, that manufacturers are expected to apply most of the cost management effort. This is due to the fact that they occupy that part of a product's supply chain where most of the value is added. Therefore, given the results shown in Table 8.50, and the fact that the application of continuous improvement is limited to the manufacturer's section of both supply chains 1 and 2, this assumption appears to be valid.

[31] It is also important to note that, although the supply chain management practices in the South African retail industry were established through surveying the opinions of retailers alone (as discussed in Chapter 5), the case study results confirm the same practices. Thus the 'bias' in the survey (as discussed in chapter 5) does not appear to have had a negative impact on the validity of the survey results.

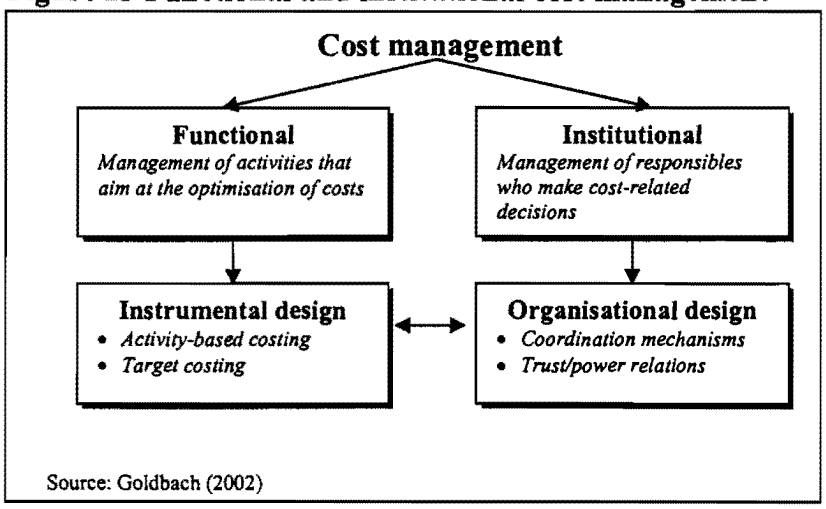
as relationships with their trading partners become closer and are aimed at improving the competitiveness of the entire supply chain. In this environment, the behavioural changes would be expected to manifest in practices such as information sharing (open book policy, for example) as a way of creating an environment where the application of techniques that require a 'common language', such as activity-based costing can be realised.

Behavioural change is particularly pertinent because there is a likelihood of incomparability of accounting data from companies along these supply chains as a result of different accounting systems (Dekker and Van Goor, 2000). As such, the application of ABC across company boundaries may not be easily achieved, thus requiring behavioural changes aimed at creating 'intimacy' between the companies along the supply chains. Such behavioural changes appear to be initially supported by practices such as open book policy and sharing of cost savings. Hoyt and Hug (2000) argue that the process of transition is cyclical, with a gestation period determined by the conditions within each industry.

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Thus in addition to the nature of management accounting practices in developing countries (as has already been discussed), it appears that currently, companies in the supply chains studied are focusing on the application of practices that draw them together, as a precursor to the application of advanced management accounting techniques on a wider scale. As argued by Goldbach (2002), the application of cost management techniques and the involvement of the 'actors' along the supply chains, need to be embedded in the organisational setting of the supply chains. It appears that the supply chain participants are reconfiguring their organisational settings through the application of cost management practices, before the adoption and application of most of the inter-organisational cost management techniques. Practices such as joint product design, open book policy, inter-company teams and the sharing of cost savings appear to enhance the creation of such organisation settings within which the application of cost management techniques can take place. Figure 23 below depicts the cost management approach emerging from the case studies.

**Figure 23 Functional and institutional cost management**




Thus cost management is taking an institutional perspective, as opposed to a functional perspective (as shown in figure 23 above). The functional cost management dimension is expected to result in the design and application of cost management techniques such as activity-based costing and target costing (Goldbach, 2002). The institutional cost management perspective entails the configuration of organisational settings to facilitate cost management through co-ordination mechanisms as well as trust or power driven relations (Goldbach, 2002). From the case study results, it appears that the institutional cost management dimension has developed way ahead of the functional dimension within the retail industry. Hence the wide-spread application of practices such as inter-company teams, joint product design, training and assistance, open book policy, strategy meetings, delivery scheduling and the sharing of cost savings.

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The application of the balanced scorecard in supply chain 2, (largely influenced by the retailer) in addition to the use of target costing and continuous improvement could be an indication of the development of the cost management approach in the supply chains studied to encompass the functional dimension. Also, as indicated by WW's Supply Chain Executive in supply chain 1, activity-based costing will be applied along the supply chain between the retailer and the manufacturer to enhance the understanding of cost drivers. The retailer in supply chain 3 is also developing a balanced scorecard that will be applied to further strengthen cost management along the supply chain.

### 8.4 Sub-problem 11

*Where, along the supply chains are these techniques and practices applied?*

This question is answered by the information provided in Table 8.50 on page 233, which shows the techniques applied at various sections of the supply chain. As can be seen in Table 8.50, most of the cost management techniques are implemented at the manufacturer's end of the supply chain, particularly in supply chains 1 and 2. This could be explained by the pressure that manufacturers encounter in the process of attaining cost targets set by retailers. It is at the manufacturer's section of the supply chain that inputs (fabric and trims for the manufacture of garments, and ingredients such as beef, vegetables and spices, for the manufacture of food) are converted into products. Consequently, most of the value added is achieved at this part of the supply chain, resulting in intense pressure on manufacturers to manage costs. Also, the results show that the application of the balanced scorecard is currently limited to the retail section of the supply chain. This appears to confirm Waweru's (2002) findings which indicated that the adoption of advanced management accounting techniques such as ABC and BSC is more likely to occur in large companies than in small companies (retailers are large in size, while manufacturers and Suppliers are smaller, as confirmed by survey results on symmetry).

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### 8.5 Sub-problem 12

*Which techniques and practices are being applied to support strategic cost management in the process of value creation along these supply chains?*

This research question is answered by relating the techniques and practices applied along the three supply chains to the theoretical framework developed at the end of the literature review. Strategic cost management involves three main themes, namely *value chain analysis*, *strategic positioning analysis* and *cost driver analysis* (Shank, 1989; Shank and Govindarajan, 1993). The value chain concept requires cost management focus to be extended beyond the company boundaries in order to encompass other supply chain participants (Shank 1989). The strategic positioning concept brings to the fore the need to configure cost management activities according to the way an organisation competes, i.e. either via cost leadership or by differentiation (Porter, 1980; Shank, 1989). Lastly, the cost driver analysis emphasises

the cost management techniques and practices along the three supply chains are analysed according to their ability to support one or more of these themes. The sections below provide detailed analysis of the individual supply chains. After the individual supply chains analyses are presented, a comprehensive analysis is then conducted, after which a general conclusion will be presented.

### 8.5 1 *Supply Chain 1*

*(i) Value chain concept*

The techniques that support value chain analysis along supply chain 1 are the balanced scorecard complemented by RTMs analysis. Practices that appear to support value chain analysis include quality focus, training and assistance, product delivery scheduling, joint product design, team-based approach and customer-approved suppliers. All these techniques and practices have an external focus that is aimed at cost reduction along the supply chain. Table 8.51 below gives a summary of the cost management techniques and practices that support value chain analysis along supply chain 1.

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**Table 8.51 Techniques and practices that support value chain analysis in supply chain 1**

| Techniques | Practices |
|---|---|
| Balanced scorecard | Quality focus |
| RTMs analysis | Training and assistance |
| | Product delivery scheduling |
| | Joint product design |
| | Team-based approach |
| | Customer-approved suppliers |
| **Value chain analysis** | |

The balanced scorecard (BSC) is applied by the retailer to focus its employees to different aspects of the business, including end-use customers and suppliers. The BSC is supported by measures that focus the company's employees to meet the expectations of the supply chain. For example, category managers are evaluated on the basis of the extent to which they work successfully with suppliers to design innovative products that are in line with the strategic thrust of RET 1. Also, cost

analysis spans organisational boundaries along the supply chain through RTMs analysis. The analysis of returns enables RET 1 and MANU 1 to jointly focus on areas that cause quality problems.

In addition to the above techniques, practices such as joint product design and inter-company teams are applied with the objective of identifying cost reduction opportunities at the interface between RET 1 and MANU 1 (on the demand side) and MANU 1 and SUP 1 (on the supply side). These practices are strengthened by inter-company training and assistance, which involve knowledge transfer from RET 1 to MANU 1 during the product development stage and from SUP 1 to MANU 1 during the manufacture of garments. Quality focus involves ensuring that quality-related costs are eliminated/reduced by focusing on the entire supply chain. RET 1 further emphasises the value chain concept through the practice of approving suppliers that MANU 1 can do business with. Product delivery scheduling aims at managing costs (out-of-stock costs due to late deliveries and markdowns due to an oversupply of stock in stores), by focusing on the part of the supply chain that is not performing properly, and hence causing costs. The practice of sharing cost savings through margins (which is seen as fair by all parties along supply chain 1), enhances the ability *and* willingness of the supply chain participants to take a value chain perspective to cost management.

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*(ii) Strategic positioning concept*

The garments that RET 1 sells are targeted at the middle- to the upper-earning segment of the South African consumers. Thus its competitive advantage is achieved largely through differentiation. Strategic positioning in supply chain 1 therefore is supported by the balanced scorecard (in conjunction with RTMs analysis), target costing, continuous improvement, and practices such as quality focus, teamwork, joint product design, customer-approved suppliers, training and assistance, and strategy meetings. Table 8.52 below summarises techniques and practices that support strategic positioning along supply chain 1.

**Table 8.52 Techniques and practices that support strategic positioning in supply chain 1**

| Techniques | Practices |
|---|---|
| Balanced scorecard | Quality focus |
| RTMs analysis | Training and assistance |
| Target costing | Joint product design |
| Continuous improvement | Team-based approach |
| | Customer-approved suppliers |
| | Strategy meetings |
| **Strategic positioning** | |

There is a very strong quality focus within supply chain 1, enshrined in the 'customer perspective' of the BSC applied by RET 1. This perspective is supported by the analysis of returns (RTMs) as discussed in chapter seven. The objective of the RTMs analysis is to get an accurate feedback system that enables both MANU 1 and RET 1 to identify the sources of quality problems as reported by end-use customers. Thus technologists within RET 1 are expected to work closely (and hence evaluated on that basis) with suppliers like MANU 1 to make sure that quality problems are eliminated. As discussed in chapter seven, MANU 1 has a very strong quality focus that is preventative in nature, as a way of conforming to the quality requirements of its customer, RET 1. In addition, all prospective suppliers are initially evaluated by RET 1 on the basis of a number of measures, one such measure being quality of inputs (fabric and trims).

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Target costing and continuous improvement are aimed at managing garment costs at the design stage and during manufacture, respectively. These techniques are applied in order to enable RET 1 to sell garments within the price parameters acceptable to its target market. Thus although the whole supply chain competes on the basis of differentiation (largely based on quality), the ability to contain costs to meet the price expectations of the target market is still important. Joint product design, training and assistance and inter-company teams are practices that support the achievement of garment quality levels and prices acceptable to the target market.

Strategy meetings between RET 1 and MANU 1 are meant, among other objectives, to share the vision which moulds the image that RET 1 would like to portray to the

public. One of the perspectives in RET 1's BSC is the 'difference' perspective. This perspective is aimed at creating uniqueness in the image of the company and the garments that the company offers. Thus MANU 1 does not supply other retailers in South Africa in order to maintain the uniqueness of garments (by avoiding the 'writing problem' as discussed in chapter six) sold in RET 1's stores.

*(iii) Cost driver analysis*

The management of cost drivers along supply chain 1 is achieved through the management of (1) structural cost drivers (such as scale, scope, experience and technology), (2) executional cost drivers (such as workforce involvement, capacity utilisation, plant layout efficiency and the exploitation of linkages within the supply chain) and (3) activity-based cost drivers. Cost management through the management of cost drivers in supply chain 1 is achieved largely through the application of practices. Table 8.53 below summarises the technique and practices used to manage costs through identifying their causes, i.e. cost driver analysis.

**Table 8.53 Techniques and practices that support cost driver analysis in supply chain 1**

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| Techniques | Practices |
|---|---|
| RTMs analysis | Quality focus |
| EDI | Training and assistance |
| | Product delivery scheduling |
| | Joint product design |
| | Team-based approach |
| | Customer-approved suppliers |
| **Cost driver analysis** | |

Scale is concerned with the investment that MANU 1 should make in its research and development, and manufacturing. The strategy meetings between RET 1 and MANU 1 assist MANU 1 in deciding on the size and nature of investment in its factories. In dealing with scope and the exploitation of linkages within supply chain 1, MANU 1 is tightly integrated with RET 1 through EDI which facilitates accurate information sharing that expedites the delivery of garments into RET 1's stores. Also order placing through the use of EDI makes the interface between MANU 1 and RET 1 efficient (through timely and accurate product order placing), thus contributing to the management of activity-based cost drivers. This is achieved by accurate orders placed through EDI which eliminate activities performed to rectify inaccurate orders that can

cause returns to manufacturer. Also, SUP 1 uses a computerized order tracking system that assists with checking progress made with MANU 1's orders, thus reducing time required to provide feedback to the manufacturer as well as the uncertainty that could affect the booking of garments into MANU 1's factories.

Through continuous improvement/workstudy, MANU 1's factory employees exploit the learning curve effect by gradually reducing the labour content of garments. In its cutting room, MANU 1 uses computerised cutting machines (technology) that are accurate and fast. The material rating process (the percentage of a given piece of garment that comes out of the factory as part of a garment) is also computerised. Thus through the use of technology, huge cost savings are achieved by way of waste reduction and time savings.

Team-based approach (both intra- and inter-company teams) and the team-based reward system (at manufacturer's part of the supply chain) assist in the involvement of employees in cost management. Between the manufacturer and retailer (MANU 1 and RET 1), joint product design entails teamwork, resulting in synergistic benefits such as cost-effective garment styles and time savings (i.e. time-compression economies) through the sharing of knowledge and experiences. The team-based bonus system used in the manufacturer's factories encourages employees to reduce waste (idle time) between the garment-making processes. The factory employees understand that the inefficiency of one (or some) of them results in the entire production line failing to get a bonus. In addition to employee involvement in cost management, the manufacturer's factory machines are arranged in a sequential order (based on the chronological order of the garment-making processes) for maximum efficiency.

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### 8.5.2 Summary

Some of the results of supply chain 1 confirm the assumptions made in the construction of the theoretical framework. The empirical evidence show that the balanced scorecard and collaborative practices such as teamwork (both intra- and inter-company teams), joint product design, sharing of cost savings, training and assistance, product delivery scheduling are being applied to achieve a value chain cost management perspective. The strategic positioning analysis is influencing cost management through the balanced scorecard, target and continuous improvement,

quality focus (not defined as total quality management), teamwork, training and assistance and joint product design. Lastly, cost management through the cost driver dimension is achieved through practices such as quality focus, training and assistance, product delivery scheduling, joint product design, team-based approach and customer-approved suppliers.

From the discussion above, it appears that few advanced management accounting techniques are being applied to support strategic cost management. Value creation through strategic cost management along supply chain 1 appears to be achieved largely through the application of practices. The only techniques that are in line with the management accounting literature and the theoretical framework are the balanced scorecard, target costing and continuous improvement. Practices such as teamwork and quality focus (to the extent that the emphasis of the production of quality garments throughout the supply chain is similar to the notions of total quality management) are also in line with the theoretical framework.

### 8.5.3 *Supply Chain 2*

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*(i) Value chain analysis*

Cost management through value chain analysis involves collaborative practices such as training and assistance, product delivery scheduling, joint product design, team-based approach (both intra- and inter-company teams), strategy meetings, collaborative stock planning, sharing of cost savings and a strong quality focus throughout the supply chain. The team approach within supply chain 2 is aimed at the sharing of knowledge between the retailer (RET 2) and the manufacturer (MANU 2) during garment design. Inter-company teams are also used between the manufacturer (MANU 2) and the CMT supplier (SUP 2) during garment manufacturer. In this regard, MANU 2 has a manager who spends 90 percent of his time in SUP 2's factory, identifying ways by which the two companies can collaborate to reduce costs. These inter-company teams along supply chain 2 also facilitate training and assistance, which ultimately result in the lowering of garment costs. Table 8.54 below gives a summary of the practices applied along supply chain 2 to support the value chain perspective.

**Table 8.54 Techniques and practices that support value chain analysis in supply chain 2**

| Techniques | Practices |
|---|---|
| | Quality focus |
| | Training and assistance |
| | Product delivery scheduling |
| | Joint product design |
| | Team-based approach |
| | Strategy meetings |
| | Collaborative stock planning |
| | Sharing of cost savings |
| **Value chain analysis** | |

The value chain perspective in supply chain 2 also takes the form of product delivery scheduling which is supported by collaborative stock planning. MANU 2 works closely with RET 2 during the planning of seasonal garment projections, fabric workshops (workshops to decide the nature of the fabric that suits the season's garment theme), the styling of the garment (through MANU 2's Style Management System) and the sales meetings (see figure 17 on page 168). These interactions take the form of strategy meetings during which the two companies share garment projections information. The objective of these strategy meetings is to ensure that MANU 2 understands the needs of its customer and thus prepares the input purchases accordingly. Also MANU 2 can make arrangements with its fabric and trim suppliers at the right time to avoid delays. Timely placing of orders with CMT suppliers like SUP 2 is also enhanced, resulting in the avoidance of delays to put garment stock in the retailer's stores. Consequently, stock-out costs due to late garment delivery into the retailer's stores are avoided, thus eliminating lost sales.

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Throughout the supply chain, quality is emphasised to ensure that the fabric and trims sourced overseas are of good quality, hence the quality testing processes described in chapter seven (preventative in nature in that fabric and trims are quality tested before they are delivered to the CMT suppliers). The testing of fabric also involves recommending how the garments made from the fabric should be cared for (this process is the source of the 'care labels' on clothes sold in RET 2's stores). Thus in a way, some form of life-cycle costing is being applied (to the extent that the care labels, if followed properly, would reduce the costs that the end-use customer incurs

after purchase). Also, during the garment manufacture, there are quality auditors whose task is to maintain quality standards that satisfy the requirements of the retailer. Consequently, by taking the value chain perspective, costs at the retailer's side such as (1) lost sales due to stock-outs caused by late deliveries, (2) markdowns due to a glut in the stores and (3) returns due to poor quality, are minimised. Also, the practice of sharing cost savings creates an environment where cost management takes an inter-company dimension as it is regarded as a win-win situation.

*(ii) Strategic positioning analysis*

Strategic positioning along supply chain 2 is influenced by the nature of the garments sold by the retailer. The target market of RET 2's garments is the middle- to the upper-income consumer in South Africa. As such, quality and uniqueness are seen as important in the supply chain's competitive advantage. Thus the supply chain competes on the basis of differentiated garments, as apposed to being a cost leader. The techniques and practices that support strategic positioning are summarised in table 8.55 below.

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**Table 8.55 Techniques and practices that support strategic positioning in supply chain 2**

| Techniques | Practices |
|---|---|
| Target costing | Quality focus |
| Continuous improvement/workstudy | Training and assistance |
| Benchmarking | Joint product design |
| | Team-based approach |
| | Strategy meetings |
| **Strategic positioning** | |

RET 2 spends a lot of money on overseas trips to understand fashion trends and then benchmark its garment offerings in South Africa based on overseas best trends. In addition to benchmarking its garments against overseas trends, supply chain 2 has a strong quality focus that is aimed at preventing poor quality inputs from being used for the production of garments, and poorly constructed garments from getting into the retailer's stores. In order to achieve this, MANU 2 has a quality assurance Executive who is tasked with the maintenance of quality standards of inputs (through quality testing of fabric and trims as discussed earlier).

Target and continuous improvement are applied at the garment design stage and during garment manufacture, respectively, to enable RET 2 to sell the garments at the price expected by the end-use customers. Thus the uniqueness in the garments sold by RET 2 is combined with the attainment of a price that is acceptable to the end-use customers. This is in line with the survey results that indicated that the price of a product, its uniqueness and quality are all equally important in conferring competitive advantage[32].

Strategy meetings (as discussed earlier) are supported by a team-based approach (both intra- and inter-company teams). MANU 2 works closely with RET 2 to understand the season's garment offerings so that the design of the garments (achieved through joint garment design teams) is not only cost effective, but achieves the desired quality level. Thus these inter-company teams are tasked with the interpretation of the 'customer's mind' into garment designs that result in high sales volumes (hence a reduction in markdowns). Within SUP 2's factories, the team-based approach supports strategic positioning in the form of team-learning that facilitates the attainment of the quality standard of garments required by RET 2.

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*(iii) Cost driver analysis*

The understanding of cost drivers along supply chain 2 is used to manage costs through the application of practices such as open book policy, vendor-managed inventory, inter-company investments, supplier association, team-based approach, quality focus, training and assistance and product delivery scheduling. Costs are managed by focusing on their sources as follows. (1) volume-based cost drivers are managed through supplier rationalisation, (2) structural cost drivers (such as scale, scope, experience, technology and complexity) are managed through the application of practices such as inter-company investments, vertical integration (between MANU 2 and RET 2) and open book policy, and continuous improvement, supplier association (3) executional cost drivers (such as workforce involvement, capacity utilisation, exploitation of linkages) are managed through team-based approach, (both intra- and inter-company teams, including training and assistance), supplier

[32] This conclusion was reached after *t*-Test results revealed that there was no statistical difference between the sources of competitive advantage such as quality, price, differentiation and exclusivity, as discussed in chapter six.

rationalisation, inter-company teams and vendor-managed inventory. These practices are summarised in table 8.56 below.

**Table 8.56 Techniques and practices that support cost driver analysis in supply chain 2**

| Techniques | Practices |
|---|---|
| Continuous improvement | Training and assistance |
| | Open book policy |
| | Team-based approach |
| | Inter-company investments |
| | Supplier association |
| | Supplier rationalisation |
| | Vendor-managed inventory |

**Cost driver analysis**

Volume-based costs are managed through the rationalisation of the supply base. MANU 2 uses only eight CMT suppliers to manufacture all its garment needs. Consequently, each CMT supplier deals with high garment volumes, resulting in economies of scale. Also, as explained by the managing director of SUP 2, MANU 2 tries to keep CMT factories busy throughout the year to avoid costs arising from idle capacity. Through the tight integration between MANU 2 and RET 2 facilitated by being vertically integrated (scope), the two companies share a number of facilities such as MANU 2's style management system, resulting in cost savings. There is also openness (open book policy) between MANU 2 and SUP 2 (though in some cases on a limited scale) which allows the two companies to find collaborative ways of reducing costs. As discussed in chapter seven, MANU 2 buys and lends specialised machines to its CMT suppliers (including SUP 2) as a way of achieving cost savings by maximising the usage of the machine along the supply chain (scale).

Inter-company teams through strategy meetings and joint product design facilitate the sharing of experiences and knowledge along supply chain 2. This practice is supported by the application of continuous improvement to enhance the performance of garment designers and factory employees (experience). Complexity is managed through dedicated CMT factories that only manufacture few garment lines. For example, SUP 2 deals with women skirts and intimate wear only. Thus due to the

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fewer number of garment lines that the company manufactures, complexity-related costs are minimised and (through experience accumulated over the years) high efficiency levels are attained.

In addition to the inter-company teams that facilitate the exploitation of experience and knowledge along supply chain 2, MANU 2 has an arrangement with SUP 2 that gives the CMT the responsibility to manage certain inventories (such as fused collars). The essence of the practice (vendor-managed inventory) is cost reduction through placing tasks along the supply chain on the partner better placed to perform the tasks. In this regard, SUP 2 is better placed to manage the fused collars inventories instead of MANU 2. This is an acknowledgement of the fact that the performance of tasks along the supply chain is placed on the partner better placed to perform them, and not necessarily undertaken by the supply chain participant who directly benefits from such tasks (exploitation of linkages).

### 8.5.4 Summary

Strategic cost management along supply chain 2 is achieved through the three perspectives namely the value chain analysis, strategic positioning and cost drivers analysis. However, apart from the application of target costing and continuous improvement, strategic cost management is mainly supported by practices which appear to be outside the domain of the management accounting literature. The dominant role played by practices as opposed to techniques is in line with the observation made in the answer to question number nine (on value and value creation), i.e. that there is widespread use of practices as opposed to techniques.

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***Supply Chain 3***

Cost management along supply chain 3 is influenced by the nature of the products sold (highly perishable) and the nature of the supply chain dynamics (largely influenced by the retailer). Apart from target costing,[33] strategic cost management along this supply chain is largely achieved through the applications of practices as discussed in the following sections.

[33] Although the balanced scorecard has been introduced, its application is still very much limited to the intra-company operations of the retailer. Thus for the purpose of this analysis, its influence on the cost management along supply chain 3 is negligible.

*(i) Value chain analysis*

The organisation of the activities and processes along supply chain 3 to attain a value chain perspective to cost management involves collaborative practices such as training and assistance, team-based approach, product delivery scheduling, joint product design, quality focus, shared transport, customer-approved suppliers and the sharing of cost savings. Table 8.57 below summarises the approach taken to achieve cost management through value chain perspective.

**Table 8.57 Techniques and practices that support value chain analysis in supply chain 3**

| Techniques | Practices |
|---|---|
| Target costing | Quality focus |
| | Training and assistance |
| | Product delivery scheduling |
| | Joint product design |
| | Team-based approach |
| | Customer-approved suppliers |
| | Shared transport |
| | Sharing of cost savings |
| **Value chain analysis** | |

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Target costing is the only technique applied along the supply chain to signal to the rest of the supply chain partners the price pressures that the retailer encounters in the market. This technique is supported by price negotiation between the retailer and the manufacturer (on the demand side) and the manufacturer and the Supplier (on the supply side). Apart from managing costs at the design stage of a product (recipe creation), target costing forces the supply chain participants to focus on the activities and processes along the supply chain that can be managed in order to meet the price expectations of the end-use customers.

As stated earlier, the retailer has a strong influence on the activities and processes along supply chain 3. As such, all Suppliers are initially approved by the retailer before doing business with the manufacturer. Measures such as quality of inputs, reliability in terms of input delivery and compliance with environmental and labour laws are used to assess the acceptability of a company as a supply chain partner. This approach is aimed at preventing costs due to poor quality inputs, poor delivery of

inputs and problems arising from environmental and labour concerns. In addition to this preventative approach, there is also a strong quality focus along supply chain 3. This is largely influenced by the market segment that the retailer serves – the middle and the upper-earning sector of the South African economy. The retailer's food technologists work closely with the manufacturer during recipe creation and product manufacture to ensure that quality and hygiene standards are maintained, respectively. In addition, the manufacturer (MANU 3) also works with Supplier (SUP 3) to make sure that hygiene standards are maintained in the supplier's factory (training and assistance). MANU 3 conducts daily and weekly tests on the food it manufactures to ensure that there is no bacterial contamination. Consequently, high quality and hygiene standards are maintained throughout the supply chain, resulting in lower returns at the retail end of the supply chain.

The daily and weekly tests conducted in MANU 3's factory are also aimed at establishing the shelf-life of the products sold in RET 3's stores. As such, this approach bears some characteristics of life-cycle costing. This is seen in the effort expended by the manufacturer through laboratory tests, to ensure that costs that the end-use customers may incur, through for example, products expiring before their stated 'used-by-date', are avoided before the products are sold.

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Value chain perspective is also taken into account through practices such as shared transport. The entire supply chain uses the same transport provider and the logistical function is configured in such as way that transport costs are minimised through efficient utilisation of trucks (see figure 22 on page 214). The shared transport facilitates product delivery scheduling that results in significant cost savings (i.e. late deliveries are avoided and delays at the retailer's distribution centre are also avoided). Other practices which support the value chain perspective include inter-company teams (on both the demand and supply sides) that facilitate joint product design, resulting in the creation of recipes that are cost effective (see figure 21on page 203).

*(ii) Strategic positioning analysis*

Table 8.58 below summarises how the strategic positioning perspective is supported by the technique and practices applied along supply chain 3.

**Table 8.58 Techniques and practices that support strategic positioning in supply chain 3**

| Techniques | Practices |
|---|---|
| Target costing | Quality focus |
| | Training and assistance |
| | Joint product design |
| | Team-based approach |
| | Customer-approved suppliers |
| | Strategy meetings |
| **Strategic positioning** | |

The products sold in supply chain 3 are marketed as differentiated product offerings. The food products are aimed at the middle- to the upper-earning consumers in South African. As such, the recipes are created to provide meal solutions that are expected to support the image of the life style of consumers in these income brackets. Consequently, the retailer has a strong influence on how this image is portrayed. Thus, as already mentioned, the retailer approves suppliers with which the manufacturer can do business. There is also a strong quality focus that is supported by inter-company training and assistance during joint product design and manufacture (as shown in figure 21 on page 203). The strategic positioning perspective is further enhanced by strategy meetings between RET 3 and MANU 3, which are aimed at emphasising the differentiation strategy with which RET 3 competes against other retailers. MANU 3 communicates the requirements of RET 3 to its own suppliers (including SUP 3) to ensure that all the supply chain partners have a common understanding.

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Target costing complements the efforts of the entire supply chain to achieve the end-use customers' expectations by ensuring that product design is cost-effective (cost-effective recipes) before the product is launched. At this stage, price negotiations with input and packaging suppliers support target costing. Thus cost reduction through the strategic positioning perspective is attained by avoiding costs that arise from poor quality inputs (quality focus, customer-approved suppliers), costly recipes (joint product design, team-based approach, training and assistance, target costing), and poorly manufactured products (inter-company teams, training and assistance).

*(iii) Cost driver analysis*

Cost drivers managed along supply chain 3 can be categorised as structural (scale, experience, complexity) and executional (workforce involvement, quality focus, capacity utilisation, product configuration, the exploitation of linkages). Table 8.59 below summarises the practices applied to manage the cost drivers along the supply chain.

Scale is related to the size of investment in research and development of recipes as well as the factory capacity created. MANU 3 and RET 3 jointly work on the development of recipes (joint product design and inter-company teams), resulting in the elimination of the duplication of resources. Also, the strategy meetings held between the two companies enable MANU 3 to make effective capital investment decisions based on the vision shared with RET 3 (e.g. MANU 3's factory currently under construction is aimed at producing new products that are in line with RET 3's strategic thrust).

**Table 8.59 Techniques and practices that support cost driver analysis in supply chain 3**

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| Techniques | Practices |
|---|---|
| | Training and assistance |
| | Joint product design |
| | Team-based approach |
| | Strategy meetings |
| | Customer-approved suppliers |
| | Open book policy |
| | Bulk-buying |
| **Cost driver analysis** | |

Inter-company teams (on both sides of the supply chain) enable the supply chain to benefit from the knowledge and experiences among employees of the three companies. The sharing of knowledge and experiences results in synergistic benefits that produce efficiency levels which are beyond the capacity of each of the companies. This is facilitated by joint product design (see figure 21 on page 203), training and assistance (for instance MANU 3 uses its hygiene standards expertise to assist SUP 3 in its factories, and RET 3's food technologists assist MANU 3's factory

employees with the wealth of experience acquired over the years). Thus instead of each company striving to achieve high efficiency levels through the accumulation of experience in isolation, the knowledge and experience residing in the companies along the supply chain is exploited for the benefits of the entire supply chain (i.e. time-compression economies). The functioning of inter-company teams is facilitated by the open book policy between MANU 3 and RET 3 (on the demand side) and MANU 3 and SUP 3 (on the supply side). The inter-company teams have access to cost information, which enables them to find ways of collaboratively working to reduce costs, through, for example, increasing MANU 3's capacity in order to take advantage of fixed costs. The management of costs driven by complexity is achieved by configuring the manufacturer's products in the factories in such a way that similar products are manufactured in the same factory. This allows the efficient utilisation of each factory's capacity. Also, each factory manufactures fewer of similar products (product configuration), resulting in (1) a less crowded working environment and (2) the attainment of specialisation, both which reduce costs.

### 8.5.5 Summary

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Cost management along supply chain 3 takes a strategic dimension by focusing on the value chain, the strategic positioning of the supply chain and the management of cost drivers. The discussion above shows that strategic cost management along this supply chain appears to be mainly supported by practices, apart from target costing (which is the only technique used). The results of this supply chain appear to indicate that, unlike what is suggested in the management accounting literature, cost driver analysis may not be the domain of activity-based costing. Other approaches are available that appear to be used to manage the cost drivers along supply chain 3. The results also confirm the assumptions made in the construction of the theoretical framework about the role of teamwork in value chain analysis, strategic positioning and cost driver analysis. Also, the results confirm the open book policy in the management of cost drivers.

## 8.6 OVERALL ANALYSIS

The results of the three case studies all show that strategic cost management is being applied (in varying degrees) along the supply chains studied. The analyses of case studies 1 to 3 revealed mixed results when related to the theoretical framework on the

application of advanced management accounting to support strategic cost management along the supply chain. The results from the case studies have confirmed the application of techniques such as the balanced scorecard, target costing, continuous improvement and benchmarking. Practices that are in line with the theoretical framework are team-based approach (both intra- and inter-company teams) and open book policy.

Overwhelmingly, the results from all the three supply chains have shown that strategic cost management is being achieved largely through (1) the application of practices (as opposed to techniques) and (2) practices that appear to be outside the domain of management accounting (particularly the advanced management accounting). This is contrary to expectations raised in the literature that suggested the use of advanced management accounting techniques such as ABC, JIT, TQM and Kaizen costing. This observation helps to clear an apparent contradiction revealed in the survey results that showed that companies in the South African retail industry are applying strategic cost management, yet they indicated that a technique such as activity-based costing was not widely used. The answer to the seemingly contradictory scenario appears to lie in how strategic cost management is being realised, i.e. through wide spread application of practices (most of which seem to be outside the domain of management accounting).

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However, a careful analysis of some of the approaches applied along the supply chains studied reveals that most of the advanced management accounting techniques or aspects of them are being applied. Thus although the survey and case studies revealed a seemingly low level of use of advanced management accounting techniques such as ABC/M, TQM, JIT and life-cycle costing, a careful analysis of the approaches applied by the three supply chains reveals a different picture. It appears that some of the practices applied along the supply chain have characteristics similar to some of these advanced management accounting techniques.

The following examples help to shed some light on the use of these advanced management accounting techniques along the supply chains studied.

### 8.6.1 Advanced management accounting

- The cost of garments is managed by focusing on the activities performed. The workstudy departments in supply chain 1 and 2 produce information about these activities and the information is used to refine the way the activities are performed as a way of reducing garment costs. The target costing approach that is commonly applied across the supply chains studied requires the understanding of activities performed to facilitate the re-engineering of products where the target costs are below the actual costs. Thus a closer look at the function of the workstudy sections in supply chains 1 and 2 reveals that there is activity analysis that is used to manage garment costs. The activity analysis approach adopted to enable the management of garment costs is similar to ABC/M in that activity information is required (this information comes from the workstudy departments) and is then used to reduce costs through the elimination of non-value added activities and processes. ABC/M approach involves the management of activities as the route to improving the value received by the customer (Maccarrone, 1998). The labour cost of a garment is seen from the activities that are required to be performed, i.e. the activities are interpreted in terms of the time per activity, and then the time is converted to labour cost. An ABC system involves the measurement of time and resources spent on work processes and then converting the time to cost data (Driver, 2001). Therefore, although none of the company said that they use ABC there is a lot of focus on activities as a way of managing the cost of garments.

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- The application of Kaizen costing (referred to as continuous improvement in these supply chains) is also apparent from the way the workstudy information is used. Activities that have been done in the past are continuously reviewed with the objective of reducing the time allocated to their performance. This is seen in the garment factories in supply chains 1 and 2 where the allowable time per garment-making operation is gradually reduced based on the experience (the learning curve effect) and training received (skills development).

- Although none of the companies along the three supply chains mentioned JIT approach, the attributes of the delivery scheduling are similar to the JIT approach. JIT aims at synchronising the operations of companies along the supply chain, where suppliers deliver inputs of the right quality, quantity and at the right time

(Agrawal and Mehra, 1998; Drury, 2000). Its emphasis is on the reduction of non-value added costs by seeking to achieve 100% on-time delivery, among other goals such as zero inventories, zero defects and zero breakdowns (Drury, 2000). In supply chain 3 for example, the Supplier has specific days and times that inputs should be delivered to the manufacturer. The manufacturer along supply chain 3 also knows the exact times to deliver to the retailer's distribution centre (each manufacturer has a 15 minute window within which to arrive at the distribution centre to offload on a specific bay). In supply chain 2, the retailer and the manufacturer work on a delivery calendar that specifies the delivery dates and times for garments into the retailer's stores. The survey results also showed that on-time delivery of goods is a key supplier performance measure.

- The quality focus practice commonly applied along all the three supply chains has characteristics similar to TQM. The focus of TQM is the identification and reduction of quality-related costs (Agrawal and Mehra, 1998; Drury, 2000). TQM emphasises preventive measures, hence the aim is to 'design and build quality *in*, rather than trying to inspect it *in* (Drury, 2000; p. 901; emphasis added). The main characteristics of TQM are focus on satisfying the customer, striving for continuous improvement, involvement of all employees, active support and the involvement of top management, clear objectives, continuous training focused on quality (Blocher *at al*, 2002). The focus of the quality initiates along the supply chains is on preventative measures (testing of input quality) rather than rectification of quality problems. This approach is supported by the selection of key suppliers (Tier I and manufacturers) who are also quality conscious and have the capability to produce good quality inputs and products, respectively. There is a lot of effort spent to create awareness of the importance of quality among factory employees. In supply chain 1, this is achieved through employee training as well as huge notices strategically placed in the factories with words such as 'do it right first time'. In addition, the analysis of RTMs due to quality problems is done right down to the particular department where the garments were manufactured. Employees are thus made aware of quality-related problems and the concomitant costs. In supply chain 2, quality awareness is also supported by training (the Learnership Centre) and posters that remind employees of the importance of quality. Therefore, the quality focus spans both the horizontal dimension (from

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suppliers of inputs right up to the retail shop) and the vertical dimension (from the shopfloor employees to top management). The involvement of teamwork (both intra- and inter-company teams) also makes this approach very similar to TQM.

- Strategic management accounting is being achieved through RTMs analysis. Bromwich (1990) argues that management accounting should be released from the factory floor to allow it to aid directly in meeting market challenges. One way of achieving this objective is for management accounting to cost a product's attributes and monitor how they perform over time. In the context of supply chain 1, for example, RTMs analysis focus on the "quality" garment attribute. The objective of RTMs analysis is to provide both the retailer and manufacturer in supply chain 1 with extend cost analysis beyond each company's boundaries and gather information that will enable them to provide the end-use customer with benefits (Bromwich, 1990). Thus the supply chain's garment attributes are being costed beyond the boundaries of the manufacturer by creating a feedback loop from the end-use customers back into the manufacturer's factories. This way, manufacturers understand the sources of quality problems and thus take measures to avoid them.

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- Some form of life-cycle costing is being applied along the supply chains studied. Life-cycle costing involves understanding and managing the total costs of a product costs incurred throughout its life-cycle (Drury, 2000). The total cost of a product over its life-cycle can be broken down into upstream costs (research & development and design), manufacturing costs (purchasing, direct manufacturing costs and indirect manufacturing costs), and downstream costs (marketing & distribution and service and warranty such as recalls, service, product liability and customer support), (Bloecher *et al* 2002). Apart from managing the costs of manufacturing, the supply chain linkages between the manufacturer and suppliers (on the upstream side) and manufacturers and retailers (on the downstream side) are assisting in managing upstream and downstream costs, respectively.

In addition to these measures, the quality focus along the entire supply chains studied is also helping with life-cycle costing. The purpose of quality focus is to reduce the costs that end-use customers incur after they have bought the product.

The lower the after-sales cost, the stronger the competitive advantage of a company. In the textile sector, life-cycle costing involves tests conducted on fabric to assess how the fabric reacts when (i) washed, either in cold or hot water (ii) iron, (iii) bleached. A 'care label' is then produced to assist end-use customers with the best way of looking after their garments. In the food sector, life-style costing takes the form of shelf-life tests that are used to prescribe a 'sale-by' and 'used-by' dates, as well as refrigeration conditions, thus helping end-use customers to reduce costs that could be caused by waste. This is particularly important in the retail industry, which is one of the industries where upstream and downstream costs account for a significant portion of total life-cycle costs (Bloecher *et al* 2002).

Therefore it can be concluded that the application of some of the advanced management accounting techniques or concepts thereof, is taking place in varying degrees of intensity, without these techniques being defined as suggested in the management accounting literature. This could be an indication that some practitioners are intuitively adopting some of the advanced management accounting without referring to the 'textbook'. Perhaps the terms given to these techniques (e.g. activity-based costing/management, just-in-time, Kaizen costing, life-cycle costing, advanced management accounting and total quality management) in the management accounting literature are too prescriptive in that when they are not mentioned as such, it gives the impression that they are non-existent. Some practitioners appear to be applying these techniques (in different forms and varying degrees of intensity) without referring to the terms used in the management accounting literature[34].

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### 8.6.2 Strategic cost management

A closer analysis of the manner in which strategic cost management is being applied along the supply chains studied also reveals interesting results. Strategic cost

[34] Activity-based costing, for example, is a term that was devised by one company and then over the years, has been regarded as part of management accounting literature. Kaplan (1990) explains the origin of this term as follows: "We did not invent this name: it was used by the John Deere Company, one of the organizations that we studied to learn about ABC. It's also important to recognise that neither we nor any other academic invented this approach. We were fortunate to have found several organizations around the world that had apparently independently developed the ABC approach to enhance their understanding of organizational expenses." This means that only one company had attached a specific name to this approach and yet serval other companies were also using the same approach without calling it ABC. This may be the reason why, some practitioners could be using this approach without necessarily using the same name.

management within the supply chains studied appears to be taking a partnership strategy, maintenance and evaluation dimensions (Buono, 1997).

*Partnership strategy/creation dimension*

The partnership strategy or creation dimension involves making a choice about who to partner with. Such choices are based on issues such as (i) complementary competences (ii) technology (iii) values (iv) responsiveness (v) stable financials and (vi) development of trust. Value chain perspective is taking a relational perspective in that retailers are selecting key manufacturers to partner with, based on the manufacturer's ability to deliver good quality products at the right price and on time (hence the use of customer-approved suppliers) and the emphasis on delivery scheduling and reduced lead times.). This means that cost management is starting at the supplier-selection stage, instead of reacting to a supplier's poor performance after the supplier has already been engaged as a supply chain partner. As stated earlier (as per the survey results), retailers select manufacturers who can deliver on time (complementary competencies), are in a stable financial position as determined by a strategic assessment of suppliers (see G $^{RET\ 3-5}$ (e) item viii for more details). Also in supply chain 1 and 3, all prospective Suppliers are approved by the retailers before doing business with manufacturers along these supply chains. Measures used to list Suppliers as 'approved suppliers' include their ability to deliver on time (responsiveness), compliance to environmental and labour laws (values) as well as their financial position (stable financials).

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The partnership creation dimension is also supporting value chain perspective by the selection of partners who can be trusted (of trust), as shown by the survey results. Complementary competencies are assessed and realised through teamwork, vendor-managed inventory and shared transport. As for technology, in supply chain 2, the retailer assists its CMT suppliers with specialised machinery. Other practices that support the value chain perspective through partnership creation involve soft loans for the purchase of machinery (technology), open book policy, joint-product design and joint-problem-solving and inter company investments (the development of trust).

*Partnership maintenance/relationship*

The partnership maintenance/relationship dimension assists in the achievement of strategic positioning in that, this perspective emphasises mutually agreed outcomes. Thus the dimension requires (1) clear communication (2) above-board practices (fairness) and (3) ethics. As shown by the case study results, strategy meetings are playing an important role in communicating the way the supply chains compete. All the supply chains studied compete largely on differentiation, hence strategy as well as weekly and monthly meetings (to discuss mutually agreed outcomes), assist the supply chain participants (especially Tier I and manufacturers) to prepare themselves to produce good quality products that match the expectations of the target market.

The survey results also showed that the level of information sharing is very high, including the sharing of future business plans. Above-board practices are supported by practices such as open book policy and the sharing of cost savings through margins (sharing cost savings through margins was regarded as fair). On the ethical issues, the partnership maintenance dimension supports strategic positioning through standards that manufacturers have to adhere to (particularly in supply chains 1 and 3), such as environmental concerns and labour laws (as discussed earlier). In supply chain 1, for example, ethical issues are emphasised though the retailer's balanced scorecard 'difference' perspective.

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*Partnership evaluation/performance*

The partnership evaluation/performance dimension supports cost driver analysis through performance assessment criteria such as (1) quality (2) on-time delivery (3) manufacturing expertise and (4) purchasing assistance. The cost drivers that are managed through this dimension could be seen as executional (quality, on-time delivery, manufacturing expertise) and volume-related (purchasing assistance). Quality and on-time delivery focus on cost drivers associated with the way the entire supply chain delivers a product to the end-use customers. The emphasis on quality along the three supply chains is aimed at cost avoidance (preventative in nature), through quality tests of inputs such as fabric and trims, and ingredients, before they are used. This assists in the reduction of (i) activities such as quality tests of the finished products and (ii) costs such as rejects and returns to the manufacturer. On-time delivery through delivery scheduling, is also aimed at the reduction of costs

caused by late delivery (stock-out costs and markdowns). The survey results showed that one of the important measures that retailers use to evaluate manufacturer's performance is on-time delivery, accompanied by the correct documentation, in order to avoid delays.

Volume-related cost drivers are managed through bulk-buying (and in supply chain 1, through sharing of import duties credits), as well as through budgetary control. In supply chain 3 for example, bulk-buying (purchasing assistance) takes the form of both retailer and the manufacturer buying vegetables and meat from the same suppliers, thus benefiting from quantity discounts. In supply chain 1, both the retailer and manufacturer use the same transport for their imports (the manufacturer imports fabric while the retailer imports some of the garments sold in its stores). The use of the same transport means that containers are fully utilised, thus achieving cost savings since transport charges are based on the volume of the container. The partnership maintenance dimension also supports cost driver analysis through the assessment of the manufacturing capability of manufacturers and Suppliers (see G $^{RET\ 3\text{-}5}$ (e) items viii & ix for more details). Where the manufacturing expertise is lacking, skills training is offered through for example, inter-company teams.

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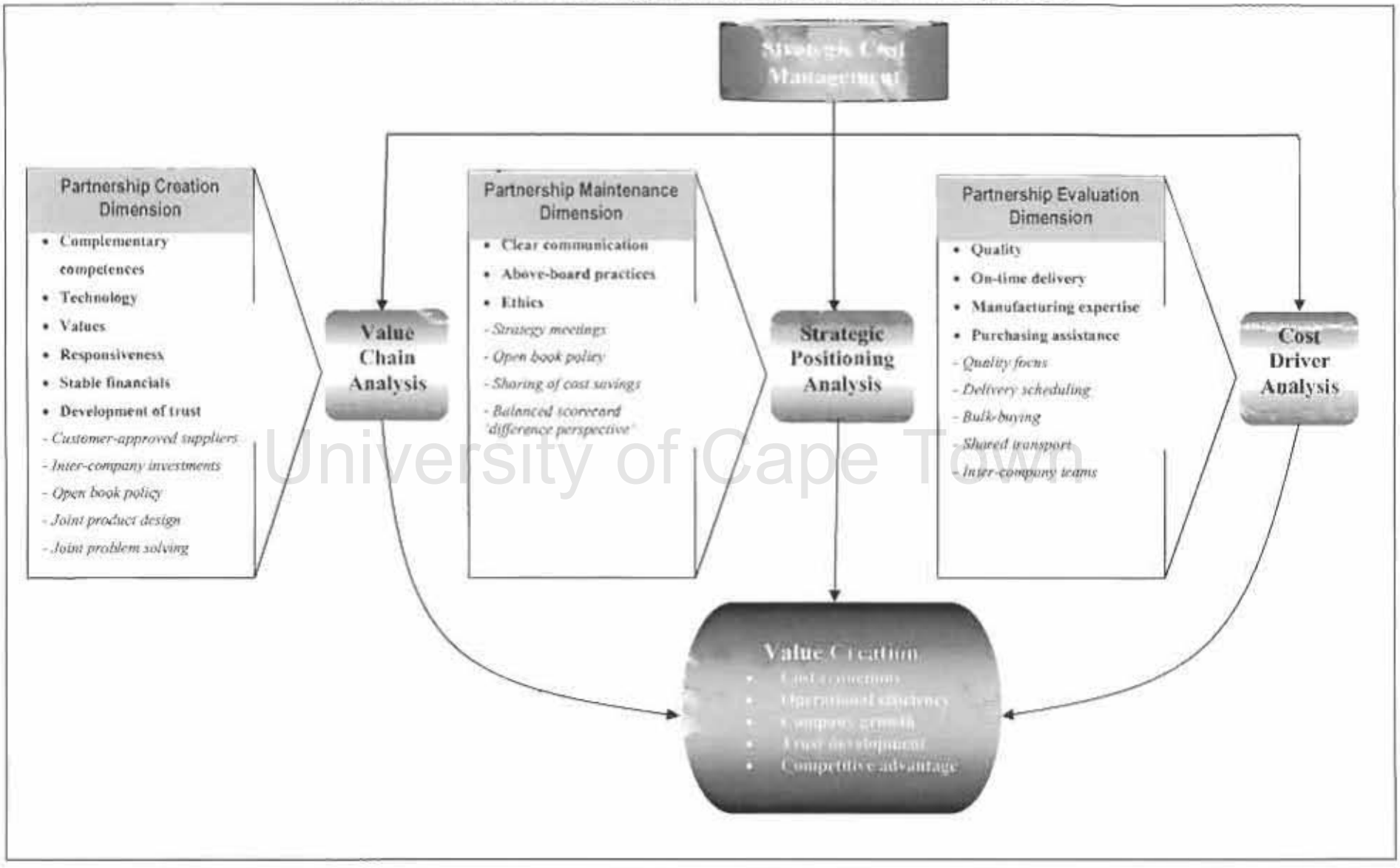
Therefore it can be concluded that strategic cost management, supported by techniques and practices most of whom are similar to the ones suggested in the literature, is being applied along the supply chains studied, without it necessarily being pronounced as such. As discussed earlier, strategic cost management is being achieved by the application of some of the techniques known in the management accounting literature as target costing, balanced scorecard and benchmarking. However, other approaches with similar characteristics to techniques such as continuous improvement, ABC/M, JIT and TQM are also being applied to support strategic cost management along the three supply chains studied. The approach taken to achieve strategic cost management along the three supply chains can be better understood in the context of the strategic alliances processes suggested by Buono (1997), namely (1) the partnership strategy (creation), (2) the partnership maintenance (relationship) and (3) the partnership evaluation (performance) dimensions. Figure 24 on page 267 below depicts these dimensions and the way they supports strategic cost management along the supply chains studied.

It is important to note that this strategic cost management model supported by the strategic alliance processes (partnership creation, maintenance and evaluation dimensions) is not limited to impacting on the value chain analysis, strategic positioning analysis and cost driver analysis, respectively. The strategic alliance dimensions impact on each other and also on other aspects of the strategic cost management concepts. For example, in supply chains 1 and 3, the retailer decides on which Suppliers (customer-approved suppliers) can do business with manufacturers along the supply chains (value chain analysis through partnership creation). The decision to list Suppliers as 'approved suppliers' also impacts on the strategic positioning analysis (through the partnership maintenance aspects such as ethical issues). The same decision (customer-approved suppliers) also assists in managing costs that are driven by quality and the manner in which suppliers deliver products. This means that careful assessment of a potential Supplier (the partnership creation dimension) reduces/eliminates costs that are driven by poor quality inputs and delivery (the partnership evaluation dimension). Thus the model on strategic cost management through strategic alliance processes as depicted in Figure 24 on page 267 is not prescriptive. Its construction is the context of the supply chain management practices and cost management approaches of the supply chains studied.

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From the above discussion, it can be concluded that strategic cost management has the potential to, and can support value creation along a product's supply chain. This is achieved through the application of some of the management accounting techniques such as target costing, continuous improvement and the balanced scorecard. The presence of the application of some of the management accounting techniques or aspects thereof such as ABC/M, JIT and TQM is not apparent because they are not specifically referred to as such. Also, the application of strategic cost accounting along the supply chains appears to be defined by the context of these supply chains. In the case studies conducted, strategic cost management is being applied along three dimensions, namely the partnership strategy, partnership maintenance and partnership evaluation. Thus strategic cost management could be seen in the context practices that characterise the particular supply chain dynamics. Also the application of techniques and practices that support strategic cost management needs to be seen in the context of the particular supply chain dynamics.

**Figure 24 Strategic cost management through strategic alliance processes**




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# CHAPTER NINE

## SUMMARY OF RESEARCH FINDINGS AND CONCLUSIONS

### 9.0 Introduction

This chapter presents a summary of the research findings, the implications of the findings and suggested areas for further research. The chapter starts by restating the problem statement and its sub-problems. The approach used to gather empirical evidence to answer the research questions is then given. The main findings under each sub-problem are presented, leading to the main conclusion of the research. The limitations of the research and areas for further research are then highlighted.

### 9.1 Problem statement and its sub-problems

This research was undertaken to investigate the application of strategic cost management along supply chains in the South African retail industry by answering the following question:

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**How is strategic cost management applied along a product's supply chain to support value creation within the South African retail industry?**

The problem statement was then broken down into sub-problems in order to fully understand the underlying issues. This was done to facilitate the gathering of empirical evidence to answer the research question. The answers to the sub-problems investigated collectively answered the research question.

**Supply chain management practices**

1. What sources of competitive advantage are regarded as key within the South African retail industry supply chains?
2. What type of information is exchanged between companies in the supply chains?
3. Which reasons explain the formation of supply chains in the South African retail industry?
4. Which activities and processes are coordinated in the supply chains?

5. What are the barriers to, and enablers for, implementing supply chain management in the South African retail industry?
6. Which performance metrics are used in the supply chains?
7. Which management accounting practices are associated with the supply chains in the South African retail industry?

**Value creation**

8. What are the definitions of value associated with the supply chain management practices in the South African retail industry?
9. How is the value associated with these supply chain management practices, created?

**Management accounting, with emphasis on strategic cost management**

10. Which management accounting techniques and practices are being applied along the supply chains in the South African retail industry?
11. Where, along the supply chains are these techniques and practices applied?
12. Which techniques and practices are being applied to support strategic cost management in the process of value creation along these supply chains?

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A multiple research design (survey and case studies) was used to gather empirical evidence to answer the research questions. The first 7 questions were structured in such a way as to obtain a broad overview of supply chain management practices in the South African retail industry. As such, a survey that employed a questionnaire was conducted from the perspective of the retailers (for reasons already given). The results of the survey created the context in which the rest of the questions were addressed. Sub-problems 8 to 12 required an in-depth understanding of value and how strategic cost management is being applied to support its creation. Consequently, case studies were conducted in three supply chains within the South African retail industry. Data collection involved interviews, observations and perusal of company documents. Interviews were supported by an interview guide that enabled consistency in the process of questioning interviewees in order to limit researcher bias.

The analysis of the survey results involved both quantitative and qualitative approaches. The case studies' results were qualitatively analysed using the pattern of behaviour strategy. The main research findings arising from the analysis of both the

survey and case studies are presented in the following sections, according to the research questions addressed.

## 9.2 RESEARCH FINDINGS

### 9.2.1 Sub-problems 1 to 6

- The survey results showed that the relationships between retailers and key manufacturers appear to be stable and characterised by high levels of information sharing. There is also a fairly high level of joint problem solving and mutual trust. The focus of these supply chains is on satisfying the end-use customer needs.

- The supply chains surveyed in the South African retail industry can be categorised into level two. The results also showed that some characteristics of supply chain levels three and four are starting to emerge. This can be seen from practices such as the sharing of confidential information, trust as evidenced by relationship-specific investment, the confidence that these relationships will continue into the future, and the consequent likelihood that more cooperative relationships will develop in future. There is also optimism that the current relationships between retailers and their manufacturers will yield future benefits which are interpreted in terms of cost reductions, improved asset utilisation, improved customer service, the attainment of marketing advantage and improved profit growth.

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### 9.2.2 Sub-problems 8 & 9

8. *What are the definitions of value associated with the supply chain management practices in the South African retail industry?*
9. *How is the value associated with these supply chain management practices created?*

- Case studies carried out revealed that value is being defined in terms of cost reductions, operating efficiency, the development of trust, company growth and competitive advantage. Thus value is assuming both a financial and non-financial dimension. Value that is interpreted in terms of cost reductions is created through the application of both intra- and inter-company cost management techniques and practices. This type of value is reported in monthly management reports. Operating

efficiency is being created by the application of intra-company practices such as efficient factory layout. This type of value is seen in the reduction/elimination of bottlenecks in factories, efficiencies in terms of inventory management and stockholding costs, resulting in time savings.

- The research also showed that application of inter-company cost management techniques and practices results in the development of trust, company growth and competitive advantage. Thus it is clear from the research results that the development of trust and the attainment of competitive advantage (non-financial value) are the domain of inter-company cost management techniques and practices. It can be concluded therefore that the creation of a long-term trust-based relationship and the achievement of competitive advantage requires the application of management accounting techniques and practices that span organisational boundaries. This implies that, if management accounting is to support the creation of value that is long-lasting (trust is seen as an asset of a 'cultural' nature that generates long-term benefits), its application along the supply chain has to take an inter-company dimension, through techniques such as target costing, balanced scorecard, activity-based costing, and practices such as inter-company teams, open book policy/accounting and the sharing of cost savings.

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### 9.2.3 Sub-problems 7 &10

*Which management accounting practices are associated with the supply chains in the South African retail industry?*

*Which management accounting techniques and practices are being applied along the supply chains in the South African retail industry?*

- The research results show that traditional management accounting techniques such as budgetary control and variance analysis are still widely used as intra-company cost management tools. These techniques are applied to manage the administrative costs as well as the cost of inputs (through purchases budgets). Thus the traditional management accounting techniques are being applied to manage volume-related cost drivers (input costs such as fabric and ingredients) within all the companies along the supply chains studied.

- The analyses of the case study results showed that the most common advanced management accounting techniques being applied along the supply chains studied are target costing and continuous improvement. This appears to be an indication of the price pressures that retailers are encountering in the market. Other advanced management accounting techniques being applied (though restricted to a single supply chain) are the balanced scorecard and benchmarking. These techniques are inter-organisational in that they support cost management beyond the boundaries of the companies along the supply chains studied.

- A careful analysis of some of the practices applied along the three supply chains studied shows the application of approaches with similar characteristics to advanced management accounting techniques. These approaches are activity analysis (through workstudy) which is similar to ABC/M, quality focus similar to TQM, delivery scheduling similar to JIT, continuous improvement similar to kaizen costing, RTMs analysis similar to strategic management accounting and quality focus similar to life-cycle costing. The conclusion submitted in this research is that some practitioners are intuitively applying these advanced management accounting techniques or parts thereof. Also, it is the submission of this research that if specific terms (e.g. ABC) are used to analyse the presence and hence the application of a technique, it is possible to conclude that such a technique is not being applied. However, if attention is given to the characteristics of the approaches that practitioners are using, and these characteristics are then compared with those of the techniques known in the management accounting literature, a better conclusion is likely to be made.

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- The empirical studies have also shown that all the practices that literature identifies as being capable of supporting strategic cost management are being applied along the supply chains studied. Practices such as sharing of information (for instance through open book policy, strategy meetings), inter-company multi-functional teams, joint product design, sharing of costs and benefits and electronic data inter-change (EDI) are commonly applied along all the supply chains studied. Other practices that are also commonly used include training and assistance, delivery scheduling (some form of just-in-time), quality focus (that incorporates some

aspects of total quality management), joint-product design and price negotiation (that support target costing), vendor-managed inventory and inter-company investments. All these practices are also seen as supporting strategic cost management in the process of value creation.

### 9.2.4 Sub-problem 11

*Where, along the supply chains are these techniques and practices applied?*

Most of the techniques and practices are concentrated at the manufacturer's end of the supply chain. It is the submission of this research that this is an indication of the pressure that manufacturers encounter in the process of meeting cost targets set by retailers. Techniques such as continuous improvement and benchmarking are applied on the supply side (manufacturers and Tier 1 supplier) of the supply chains. However, most of the practices such as quality focus, team-based approach, training and assistance, joint product design and sharing of cost savings are applied across all supply chains, which could be a signal that companies along the supply chains studied are taking a supply chain perspective of cost management.

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### 9.2.5 Sub-problem 12

*Which techniques and practices are being applied to support strategic cost management in the process of value creation along these supply chains?*

- The research has also demonstrated that strategic cost management can support value creation along a product's supply chain. From the case studies undertaken, techniques that support strategic cost management include target costing, continuous improvement, balanced scorecard, benchmarking, and approaches that have been seen as mimicking other advanced management accounting techniques such as ABC/M, TQM, JIT and life cycle costing.

- The research has also revealed that practices such as teamwork (both intra- and inter-company), joint product design, joint problem solving, sharing of information (through strategy, weekly and monthly meetings), quality focus, sharing of cost savings (which should be seen as equitable), training and assistance, customer-

approved suppliers, vendor-managed inventory, and inter-company investments all support strategic cost management.

- This research has also shown that the application of these techniques and practices occur in the context of an array of other practices which supply chain participants have adopted. Therefore, the value creation potential of strategic cost management is seen in the context of strategic alliance processes, namely the partnership creation, maintenance and evaluation dimensions. Thus the application of the management accounting techniques and practices that support strategic cost management occurs in the context of these supply chain relational structures. The ability of advanced management accounting to support strategic cost management along a product's supply chain should be seen in the context of these organisational settings.

## 9.3 CONTRIBUTION OF THE RESEARCH

The major contributions of this research derive from the empirical research adopted. Firstly, the empirical research on the application of strategic cost management was conducted by gathering data from three supply chains along three different participants along the supply chains, as opposed to gathering data from one stage of the supply chain only. Secondly, the research makes a contribution to the management accounting literature through the use of qualitative research methods to study the use of strategic cost management techniques and practices along the supply chain. Thirdly, the research helps to gain insight into this important, emerging and yet ill-defined area by addressing the issue of the role of management accounting along the supply chain, albeit from an exploratory perspective.

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## 9.4 CONCLUSION

Strategic cost management has potential to support value creation along a product's supply chain. However, its applications should be seen in the context of an array of other organisational settings of which it forms a part. Its ability to support value creation along a product's supply chain should be seen in the manner in which it supports other organisational structures which maintain the co-operative relationship between supply chain participants. The way in which advanced management techniques and practices are applied to support strategic cost management along

supply chains should be interpreted in terms of the ability of these techniques and practices to also support the organisational structures that characterise the supply chains. Also, the application of certain advanced management accounting practices should be recognised from the characteristics of the approaches used by practitioners, and not exclusively from the terms used.

## 9.5 LIMITATIONS OF THE RESEARCH

The use of the 'snowball' approach implied that the researcher was referred by retailers to specific manufacturers in the supply chains studied. Consequently, only relationships existing between the retailers and the identified manufacturers could be studied. This means that the supply chain management practices identified in the case studies should be interpreted in the context of the supply chains studied, and not generalised to all supply chains in the food and textile sectors.

Also, it should be pointed out that the practices studied and hence reported should also be seen in the context of the influence of the retailers along the three supply chains (as mentioned in the presentations of the case studies' results in chapter seven). Thus the practices applied may not reflect the general application of practices in the South African retail industry. However, the objective of this research was not the generalisation of the results to the entire industry. Rather, the objective of the research was to gain insight into this emerging and yet ill-defined area.

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Although the empirical study has confirmed the application of the theoretical framework (see figures 7 and 24), the results of this research are still tentative. Also, while the framework appears to suggest that value chain analysis, strategic positioning analysis and cost driver analysis are applied in isolation, the results of the study have demonstrated that there is some interaction between these concepts. Thus the model needs to be further developed and refined through more empirical research.

## 9.6 AREAS FOR FURTHER RESEARCH

- This research was exploratory in nature in that, not only was it the first time that an understanding of supply chain management practices in the South African retail industry was sought, it was also the first time that the interaction between the two disciplines (supply chain management and strategic cost management) was

investigated. Thus more research needs to be done to focus on issues such as the impact of the use of power (i.e. its effects on the nature of co-operation achieved between supply chain participants) and how this affects the nature of management accounting techniques and practices used along a supply chain.

- More case studies need to be conducted out to investigate certain other aspects of the supply chains in the South African retail industry. For example, the issue of trust could be further investigated to obtain more insight into techniques and practices that engender trust, as well as those that hinder it.
- This research has not covered all sections of the retail industry, for example the durable goods (furniture) supply chain has not been examined. Case studies need to be conducted to also investigate the way management accounting is applied to support strategic cost management within this sector. Also case studies that analyse survey results from the FMCG and textile sectors separately could yield more interesting results since the different contexts in which these companies operate could entail different types of relationships that could have different implications for the management accounting information used.
- More surveys and case studies need to be done to compare management accounting and supply chain management practices in all three sectors of the South African retail industry, namely the textile, food and furniture sectors. Theories such as the contingency theory could be applied in understanding any differences that may emerge from the surveys.
- More in-depth case studies focusing on the application of advanced management accounting techniques such as the balanced scorecard, ABC and life-cycle costing need to be carried out so as to gain an understanding of the process of their adoption and application by supply chain participants.
- The results of case studies in the South African retail industry could also be compared with automotive supply chains with specific reference to the application of strategic cost management.
- Other supply chains in the South African retail industry where more power resides with suppliers should be explored and results thereof compared with the results of this research in terms of using management accounting tools.

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# APPENDIX A

## DATABASE FOR MANUFACTURERS: PURCHASING FUNCTION INTERVIEW RESULTS

| PURCHASING DEPT. | Supply Chain 1 | Supply Chain 2 | Supply Chain 3 |
|---|---|---|---|
| **Company Name** | MANU 1 | MANU 2 | MANU 3 |
| **Job Title** | Purchasing Manager | Sourcing director | Purchasing Director |
| **Period with Company** | 9 years | 5 years | 6 years |
| **Period in Purchasing** | 9 years | 5 years | 6 years |
| **General Issues** | | | |
| 1 What are the keys competitive issues facing your company? | MAN 1-1<br><br>Competitive issues that we face are as follows.<br>(i) Price,<br>(ii) quality and<br>(iii) on-time delivery as well as<br>(iv) competition with other suppliers<br><br>However, because of the way our customer conducts business, there are very few approved suppliers that we compete with. | MAN 2 - 1<br><br>There are two types of sourcing issues: overseas and local.<br><br>With the local suppliers, our major challenges lie in the following:<br><br>(i) Forming relationships with them to allow us to buy in bulk.<br><br>(ii) There are also reliability problems with the local suppliers such that at times we do not get our supplies on time. The suppliers don't deliver on time and some of their quality is very poor.<br><br>(iii) Also some of them have geared themselves for export, leading to shortages in local fabric supplies.<br><br>(iv) For overseas suppliers:<br>There are time constraints with our overseas supplies because it takes more time to bring in fabric from say China. | MAN 3 - 1<br><br>The specific issues lie in the following:<br><br>(i) Approved sources by our customers, i.e. we can only buy ingredients from suppliers that have been approved by our customer.<br><br>(ii) Price of ingredients and packaging<br><br>(iii) Availability of ingredients on time since our factories cannot wait for even 30 minutes for ingredients to arrive and still meet the delivery time required by our customer. |
| 2 Have you re-engineered the Purchasing function in the past year? If so, why? | MAN 1 - 2<br><br>We have changed the function in small ways in response to the market. We now focus on a few suppliers for the inputs that we require. | MAN 2 - 2<br><br>We change to the demands of the consumers hence we are always making adjustments. | MAN 3 - 2<br><br>Our business has grown over the years, and hence the function has also grown from being run by two people to a department that has a Director in charge of it. |

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| 3 How is the Purchasing function structured in terms of:<br><br>(i) Its organisation?<br><br>(ii) Reporting mechanism? | MAN 1 – 3<br><br>We have a Purchasing Executive at the top, then the Purchasing manager. Below the Purchasing Manager is the Fabric Store Supervisor and clerks responsible for ordering fabric and trims | MAN 2 – 3<br><br>We have a fabric Buyer and a Designer who report to me. | MAN 3 – 3<br><br>The purchasing director, packaging buyer, produce buyer and other ingredients buyer. Each factory has goods receiving staff – two per factory – one for packaging and the other for ingredients. |
| 4 Does the Purchasing function have written, specific, quantifiable cost savings/cost management objectives?<br>If so, what are they? | MAN 1 – 4<br><br>(I) Our function is to meet the cost as specified by the garment's fabric and trim estimated cost. We use budgets to achieve the estimated cost by striving to remain within the fabric and trims budgets<br><br>(II) However, we also try to balance quality of the garment fabric and the price as well as the delivery. There is no point in buying cheap fabric and trims that are of poor quality and that are not delivered on time.<br><br>(II) The purchasing department is accountable to the Operations Director. | MAN 2 – 4<br><br>(I) Price levels are determined beyond which we are not supposed to go in buying our fabric. These parameters guide us, especially with the fluctuations of the currency, in negotiating with our suppliers.<br><br>(II) The sourcing function is accountable to each trading company (for fabric and trim) and to the Operations Director through me (for ready made garments) | MAN 3 – 4<br><br>We try to ensure that we are getting the best price for our inputs by doing the following:<br><br>(I) We compare the price of ingredients from different suppliers. It does not mean that we buy from the cheapest supplier because we have to buy from the approved suppliers. We use the information we get from price comparison to go to our approved suppliers and negotiate with them if the same ingredient is cheaper elsewhere.<br><br>(II) We also try to have a close working relationship with all our key approved suppliers so that we know well in advance when input costs are going to increase and reasons thereof.<br><br>(III) We then have meetings with our key suppliers to look at ways of preventing the cost increases. For packaging for example, we get to understand their business and they in turn get to understand our business. Thus we meet monthly with our packaging suppliers to look at the volumes that can be ordered in order to get the best price. This interaction enables us to find ways of keeping input costs down. |
| 5 How is the performance of the Purchasing function evaluated? | MAN 1 – 5<br><br>(I) We have to be effective within the parameters of on time delivery; we have to make sure that the inputs are here on | MAN 2 – 5<br><br>We are evaluated on the basis of:<br>(I) on-time delivery of<br>(II) good quality inputs at competitive prices | MAN 3 – 5<br><br>We look at the cost of<br>(I) ingredients and<br>(II) packaging to see their cost savings.<br><br>However, this is not yet |

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| | time. That is the main purpose of the purchasing department. Issues considered are for instance:<br>(ii) How many lines stood still, and for how long over the last three months?<br>(iii) Are there savings in the purchase of fabric and trims? | | tied to the reward system. |
| **Cost Management Specific to the Purchasing Function** | | | |
| 6 How important is cost management within the Purchasing function? Why? | MAN 1 – 6<br><br>(i) Cost management is very important because of the nature of the industry we operate in. We aim to achieve the best price from our suppliers, depending on quantity and quality.<br><br>(ii) We make sure that the garment fabric and trims are not very expensive such that we price ourselves out of the specific market where we want to sell the garment. | MAN 2 – 6<br><br>(i) Cost management is very important. It is an ongoing thing – it is looked at all the time. We need to shorten the period it takes to bring in our inputs so that we do not disrupt production.<br><br>(ii) We also need to manage the cost of our inputs as a way of reducing the cost of our garment in order to remain competitive. | MAN 3 – 6<br><br>(i) Cost management is important because inputs (ingredients and packaging) constitute the bulk of our product costs.<br><br>(ii) Also we have to meet the price targets as required by our customer. Our customer tells us the price at which a garment will be sold to the public. They also tell us their margin and from the two, we get to understand our target selling price. We then have to find ways of reducing costs to make sure that we can make a profit at that target selling price. We achieve the target cost by making sure that our input costs are not too high. |
| 7 Where do you focus your cost management efforts within the Purchasing function? | MAN 1 – 7<br><br>(i) We make sure that we buy a good quality garment at the best possible price from our suppliers.<br><br>(ii) On time delivery is also very important because if the fabric and trims are not delivered on time, then costs will go up. This is because our production lines will not have inputs to work on. This also has an impact on our ability to deliver the garments required by the customer. | MAN 2 – 7<br><br>(i) We focus on the cost of garments and fabric we import, i.e. the price we pay for fabric and garments. This is to ensure that the customer gets the best possible price we can afford.<br><br>(ii) We also have a huge quality focus which is implemented from the beginning. Hence we have a Quality Control Executive within our company. Right from the time we buy fabric, tests are conducted and quality is checked every step of the way to ensure that we get good quality fabric and garments, which in tum impacts positively on cost reduction. | MAN 3 – 7<br><br>(i) The main focus is on understanding why price increases are coming through and what can be done about it. In the past we used to wait for price increases to come through, i.e. we were reactive.<br><br>(ii) Now we are pro-active in that we work with the suppliers to find ways of:<br><br>(a) preventing cost from going up,<br><br>(b) delaying price increases, or<br><br>(c) reducing the cost of ingredients. |

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| | | | (iii) The main motivation for us taking such a pro-active stance is that we do not easily get price increases on the goods we sell to our customer. This is because the further you go down the supply chain, the harder it is to get a price increase. |
| 8 Describe your overall cost management approach within the Purchasing function for:<br><br>(i) New products | MAN 1 – 8<br><br>(i) We know the lead-time on most of inputs. We then plan together with our Planning Department to ensure that when we order fabric and trims, the production of the relevant garments has already been planned for. This is to avoid delays in production.<br><br>(ii) We try to make sure that our suppliers supply on time, in synch with the scheduled production of the garments. Therefore delivery schedules have to be strictly adhered to as a way of reducing costs of idle time.<br><br>(iii) If there are problems at the supplier's side, we communicate and find alternative ways of dealing with the problems, for instance re-scheduling production of another garment. Our ability to re-schedule production depends on whether the factory is operating at capacity or not.<br><br>When we have a lot of garments that we are working on, we can easily re-schedule. However, when things are tight as they are now (we are on short time at the moment), production lines are looking for work. Thus we cannot | MAN 2 – 8<br><br>(i) We focus on the cost of the fabric and trims. We manage the price of fabric and trims through price negotiation with our key suppliers.<br><br>(ii) Our responsibility is to ensure that we get reliable suppliers who will deliver:<br>(a) quality fabric, trims and garments<br>(b) on time. On-time delivery of inputs ensures that the production of garments is done as scheduled. This reduces downtime, which translate into cost savings. | MAN 3 – 8<br><br>(i) We work as a team with the product development team on a new product. Our buying teams work with the product development team on issues regarding the ingredients that they need. The role of the purchasing function is to find alternative ingredients at the best<br>(a) price, achieved through price negotiation with key suppliers, and<br>(b) quality from the approved suppliers.<br><br>(ii) Though price negotiation and sourcing good quality inputs from our suppliers, we manage to avoid cost increases in our products. |

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| | afford to wait for a week to get fabric and trims from suppliers, as this will increase the cost of idle time.<br><br>(iv) We negotiate with our suppliers to make sure that we get the best price for the relevant fabric quality. This way we reduce our input costs.<br><br>(v) We also focus on the service that the supplier will give us.<br><br>(vi) We make sure that the fabric and trims have been quality tested. We therefore reduce the cost of poor garment quality such as rejects and returns from our customer (known as returns to manufacturer, i.e. RTMs)<br><br>(vii) Also, we only use suppliers that have been approved by our customer. Prospective suppliers have to satisfy the standards set by our customer in terms of quality (a function that is done by a third party called Inter-tech Testing Services) and ethical issues such as compliance with environmental standards. We only get a list of approved suppliers from our customer which means less problems with quality issues. | | |
| (ii) Existing products | | | (ii) With the existing products, the Director responsible for costing keeps reviewing the cost of product and working with the buyers on what the current price of ingredients are. This facilitates the updating of the product costs and helps in focusing attention on where costs could be reduced. |

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| 9 What is the Purchasing function's responsibility for cost of : | MAN 1 – 9 | MAN 2 – 9 | MAN 3 – 9 |
|---|---|---|---|
| (i) Raw materials | Delivery of:<br>(I) the best quality fabric<br>(ii) at the best possible price and<br>(Iii) on time. On-time delivery of inputs reduces the cost of idle time in the factories. | (I) We are responsible for buying good quality fabric at the best possible price.<br><br>(II) We also try to take advantage of the currency fluctuation by buying forward cover (if we believe the currency is going to fall against major currencies) the minute we know about the order. This reduces our costs of fabric and garments significantly.<br><br>Although at the moment the Rand has strengthened against other major currencies, we have certainty in that we have already placed our orders in advance (at a time when the Rand was R11 for a US$). However, we also benefit from duty because it is paid based on the date of shipment, which is now at R8 to a US$. | (I) We are responsible for buying good quality ingredients at the best possible price from the approved suppliers.<br><br>(II) For existing products, we work with the costing team to update the cost database.<br>(Iii) Also we are responsible for sourcing the best ingredients and packaging from our approved suppliers. |
| (ii) Products produced? | As above | As above | As above |
| **10** Are personnel in the Purchasing function held individually responsible for cost variances of: | **MAN 1 – 10** | **MAN 2 – 10** | **MAN 3 – 10** |
| (i) Raw materials | We check fabric for quality, length, colour and quantity. We have total responsibility for the fabric but we don't hold personnel in the Purchasing department individually responsible for variations. | We are only held responsible for the cost variances of the trims and fabric we buy. | We are not yet held accountable for variances. However, we are aware of the variances from the monthly management accounts generated by the finance department. That helps us to focus on the problem areas. |
| (ii) Products produced? | Our personnel are not held accountable for cost variances from products produced. | We are held responsible to the extent that the cost of fabric and trims impacted negatively on the cost of garments produced. | |
| **11** Are the cost variances for (i) raw materials and (ii) products produced tied-in to the reward system within your company? | **MAN 1 – 11**<br>No they are not. We will start variance analysis as from the next financial year. | **MAN 2 – 11**<br>The finance department produces variance reports that show:<br>(I) variances due to suppliers' price increases and | **MAN 3 – 11**<br>No they are not. That will be done in future. |

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| | | (ii) variance caused by currency fluctuations. However, variances are not really tied to the reward system although we monitor closely the variances caused by prices increases for negotiation purposes. | |
| 12 What are the cost variances of:<br><br>(i) Raw materials<br><br>(ii) Products produced compared to? | MAN 1 – 12<br><br>N/A<br><br>N/A | MAN 2 – 12<br><br>Variance reports are produced per style. Here we focus on two types of variances:<br><br>(I) Cost-price variances<br>Cost-price variances show us what we should have paid against what we actually paid. We compare the variance against previous periods.<br><br>(II) Currency gains/loss variances<br>The Currency variance arises from the fact that we can buy forward, and depending on the strength of our currency against the US dollar at the time we purchase the fabric, we can have a gain or a loss.<br><br>Also with regard to currency variances, we can buy forward for the price of our fabric. However, we cannot buy forward for duty and transport. Here we pay the spot rate for the US dollar, and this may cause either a positive or negative variance. | MAN 3 – 12<br><br>Cost of ingredients are expressed as a percentage of turnover and then compared to:<br>(I) previous month<br>(II) same month in the previous year<br>(III) the budget<br><br>This gives us enough ways of looking to see whether we are doing well or not. We then focus attention on areas where we should reduce costs. |
| 13 What is the role of the Purchasing function in the:<br><br>(i) Development of an understanding of key customer needs? | MAN 1 – 13<br><br>(I) The purchasing department does not have much contact with our customer. Our customer interacts with our merchandisers.<br><br>(II) However, we have an indirect contact with our customer through our merchandisers. We meet with our merchandisers all the time and then we get to understand what the customer needs. | MAN 2 – 13<br><br>We interact with the sales and marketing department to get to know what the customer wants and then we get the best possible quality fabric and trims at competitive prices. | MAN 3 – 13<br><br>Not much, because we are producing someone else's brand. However, we have a good understanding of the brand that we are producing. We have to understand the needs of the customer so that we will be in a position to buy the right ingredients at the right price. That understanding filters through to all purchasing function personnel as well as the rest of our company's employees. |

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| | We then translate that understanding into the quality, colour and delivery of fabric and trims required for the manufacture of the garments for the customer. Sometimes we deal directly with the customer through its Technologists if there are problems with the fabric. | | |
| (ii) Development of an understanding of customer value proposition within your company? | As above. | Our role is simply to buy quality fabric and trims at the best possible price, in line with the requirements of our customer. | As above. |
| 14 What key cost drivers does the Purchasing function manage within your company? | MAN 1 – 14<br>(i) Price,<br>(ii) quality and<br>(iii) delivery of fabric and trims. | MAN 2 – 14<br>(i) The cost of fabric and trims,<br>(ii) Quality of fabric and trims<br>(iii) On-time delivery. If we don't deliver on time, then we lose sales. | MAN 3 – 14<br>The cost of<br>(i) ingredients and<br>(ii) packaging. |
| **Structure of Cost Management Efforts within the Purchasing Function** | | | |
| 15 Who drives cost management within the Purchasing function? Please explain the nature of their responsibility | MAN 1 – 15<br>(i) The purchasing manager with the involvement of all employees within the department. It is a team approach.<br><br>(ii) The Operations director keeps an eye on what we are doing as far as cost management is concerned. | MAN 2 – 15<br>(i) A team in the Sourcing Function drives the cost management effort within our department.<br><br>(ii) However, cost management within our company is a team effort, from the clerk to the Managing Director. There is an understanding and knowledge of the importance of cost management. | MAN 3 – 15<br>The Purchasing Director with a team of buyers. |
| 16 How is the Purchasing function integrated into your company's overall cost management efforts? | MAN 1 – 16<br>(i) Communication is the key issue. We have planning meetings once a week. We also have pre-production meetings everyday once a garment has been approved and is about to be produced. We work closely with the Planning Department, the Design Department, Production and Sales (Merchandisers).<br><br>(ii) The Planning Department schedules all the work on the | MAN 2 – 16<br>(i) We interact closely with the other departments – Production, Logistics, Quality Control and Finance – on all matters relating to the manufacture of garments.<br><br>(ii) We also have our personnel (Fabric and Garment Buyers) in each of the customer's teams companies. | MAN 3 – 16<br>We work closely with the Product Development and Production personnel. Our focus is on the procurement of the best quality inputs at the best prices. |

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| | production lines after the Sales department has 'sold' a garment concept to the customer as designed by the Design department. Our task is to source all the fabric and trims required for the garment on time, at the right price and quality. As a result, we avoid the cost of idle time in the factories as well as the cost of poor quality garments.<br><br>(iii) We also make sure that we give advice to the Design department in terms of the type of fabric and trims they can use for a given garment design to make sure that the design is cost-effective. | | |
| 17 Do you believe your company takes a total supply chain perspective to cost management? If you believe so, please explain how. If not, please explain why not. | MAN 1 – 17<br><br>Yes. We have a close relationship with our suppliers and customer. | MAN 2 – 17<br><br>We try more and more to establish relationships that are meaningful. However, our challenge is that the market is fast-changing hence we end up going to different suppliers who are in a position to offer us the best fabric and garments that satisfy our ever changing customer needs. | MAN 3 – 17<br><br>Yes we do. We work closely with our suppliers and customer and ensure that our processes are efficient. For instance, we use the same transport to deliver ingredients from our suppliers. The same transport then delivers the finished product to our customer. Thus the trucks are always with goods to and fro our premises. |
| 18 Do you benchmark cost management practices in the Purchasing function against other companies in the industry? | MAN 1 – 18<br><br>No we do not. It is not our practice to do so. | MAN 2 – 18<br><br>Our policy is that we should understand what other companies are doing to see if we are at the right price level. | MAN 3 – 18<br><br>No, because our company is a dedicated manufacturer. |
| **Supply Side Cost Management Issues** | | | |
| 19 How does your company, and particularly the Purchasing function use strategic cost management with key suppliers? Is there a model that is always used in all circumstances? | MAN 1 – 19<br><br>(i) We focus on synchronising our production planning and the fabric and trims delivery schedules.<br><br>(ii) We also make sure that we get the best quality fabric and trims at the best possible price. | MAN 2 – 19<br><br>(i) We try as far as possible to place large orders with our CMT suppliers. We do this by using a few CMTs for the manufacture of garments for the different retail outlets that are within the Foschini group. This then enables us to negotiate better prices for the manufacture of our garments through | MAN 3 – 19<br><br>(i) We spend time discussing price with our key ingredients suppliers.<br><br>(ii) We also discuss with our packaging suppliers to see whether a change in the way we buy from them would positively impact on their costs of production. For example, we can agree with the packaging |

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| | (iii) Our suppliers have computerised their processes and we are also computerised. Therefore, in terms of tracking the movement of incoming fabric, they are in a position to tell us exactly where it is, i.e. is it still in their production lines, finished or on its way, and when to expect it. This helps to plan when to book a garment for production.<br><br>(iv) Our order enquiries are now being electronically checked which means that our suppliers can easily access an order number and give us feedback as to the status of the order. This saves a lot of time. In the past, our suppliers used to jot down the order number after an enquiry and then go to the factory to ask the factory manager about the status of the order. They would then come back and tell us. This was time-consuming.<br><br>However, our ordering process is still done through faxes, a process that is not that efficient, especially where the suppliers cannot clearly see the figures on the fax copy. This is an area for improvement. | discounts.<br><br>(ii) The CMTs benefits from economies of scale by working on large quantities of garments. | company that instead of running the production of packaging 10 times a year, they can only do it 4 times. This requires us placing larger orders, resulting in the reduction of cost of producing the packaging, hence keeping the price of packaging low.<br><br>(iii) Therefore, it is all about getting involved with the supplier to discuss ways of doing things in such a way that costs are kept to the minimum. The way order, the frequency of our orders, volume discounts or benchmarking the price of our suppliers with other suppliers, all help in keeping the price down. |
| 20 Do your key suppliers use a strategic cost management approach? Do you encourage your key suppliers to use strategic cost management? If so, how? | MAN 1 – 20<br><br>(i) Yes. For instance one of our key suppliers whose factory is in Swaziland, used to deliver their products to us by air into South Africa. Their company here in South Africa would then receive the goods, sort them and deliver to us. That was inefficient and thus costly. They now | MAN 2 – 20<br><br>Yes, we encourage our suppliers to also focus on cost management. They focus on efficient production processes through training their employees. They have to be cost-effective if they are to do business with us. | MAN 3 – 20<br><br>We hope so, because they enter into a competition, especially the packaging suppliers. If they can't reduce their costs, then they lose our business. |

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| | use a third party to deliver, and this has improved the service they offer to us as well as lowering cost of the trims we buy from them.<br><br>(ii) We also work closely with our suppliers to synchronise their processes with ours through for example, production schedules. | | |
| 21 (a) What are the benefits that accrue to:<br>(i) your company, and | MAN 1 – 21<br><br>(i) We have developed trust over the years as a result of working closely with our suppliers. I feel that I should be able to pick up my phone and tell a supplier that I am in trouble and they do something.<br><br>(ii) Most of my suppliers go out of their way to assist us when we need extra trims or fabric at short notice. This is due to a relationship based on trust and collaboration that has been built over the years with our main suppliers, which is beneficial to our company. Without that kind of relationship, you would not get that level of service.<br><br>(iii) The relationships have also had a positive impact on our bottom line. For instance, when we get our supplies on time, or the extra supplies at short notice, it means our production line is not going to be idle, which means a significant reduction in cost and improved service to our customer. Both these have a positive impact on our profit.<br><br>(iv) Also, our suppliers assist us when we have problems with the | MAN 2 – 21<br><br>(i) The development of a long-term trust-based relationship that gives us a strategic advantage in the market. Our fabric and garment suppliers in Asia, particularly Chain have an exclusive relationship with us and we have a US$10 million line of credit.<br><br>(ii) We benefit from a lower cost of fabric and garments. This then gives us an advantage in the market against our competitors. | MAN 3 – 21<br><br>(i) The benefits are in form of lower cost of ingredients and packaging (we deduct the cost reduction straight from the cost of the ingredients and packaging). The lower input costs translate into an improved profit for our company. |

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| | fabric or trims that they would have supplied us with. For instance, there was a time when our machinists had problems with a certain type of zipper. The design of the garment (skirt) required that the zipper be 'invisible' once it is closed, and that was not happening. The zipper was locking on the inside of the skirt, thus making it go over the seamline.<br><br>We phoned the supplier and within minutes they had sent their representative who trained our machinists how to use the zipper correctly. After the mistake had been corrected, our supplier and us went to all our customer's stores where the garment had already been delivered to make sure that garments that had the same problem were removed immediately from the stores.<br><br>(v) We also get preferential rates when it comes to the prices of fabric and trims that we buy from our key suppliers. Consequently, we are in a position to reduce our production cost and make garments that are competitively priced. | | |
| (ii) your key suppliers, from the use of strategic cost management with key suppliers? | (vi) Our key suppliers benefit from continued and more business from us.<br><br>(vii) We give them huge orders which enable them to achieve high volumes in their production processes, which translate into long production runs. This obviously has a cost reduction effect | (iv) Some of our suppliers have grown from the business that we give them to the point of being able to enter other highly competitive markets.<br><br>For example, a long-term relationship that we have with a company in India, has enabled that company's business to grow to the extent that they now | (ii) They continue getting our business, as well as<br>(iii) improving their bottom line. |

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| | through economies of scale as well as lower set-up costs. | supply the USA market. Had it not been for our continued support over the years, the company would not have been in a position to increase its volumes at the same time reducing costs to the point where it can charge competitive prices to enter the USA market. | |
| (b) How are these benefits measured and communicated to:<br>(i) personnel in the Purchasing department,<br><br>(ii) personnel in other departments and | (viii) The benefits are communicated in our department on a daily basis through formal and informal channels. In our company we communicate these benefits through Merchandisers and Designers as well as through the Executive meetings. | (v) The benefits are communicated through lower cost, which translates into higher margins. The benefit is measured in terms of more business from our retail customers. | (iv) The benefits are communicated through monthly management accounts as well as the company profits. Variance analysis helps us to see where we are gaining in terms of our ingredients and packaging. |
| (iii) your key suppliers | (ix) We discuss what is going right through formal and informal meetings with our key suppliers. | (vi) In terms of lower cost of inputs and through monthly meetings with our CMT suppliers. Also if we are benefiting from the relationship we have with a supplier, we continue giving them more business. | (v) We discuss benefits in meetings that we have with our key suppliers. |
| **Demand Side Cost Management Issues** | | | |
| 22 How does your company, and particularly the Purchasing function use strategic cost management with key customers? Is there a model that is always used in all circumstances? | MAN 1 – 22<br><br>(i) Our customer first of all approves all our suppliers. So for any company to supply us with fabric and trims, they have to go to RET 1 first and get their fabric or trims tested for quality and ethical standards, e.g. labour practices and environmental sensitivity. Once these criteria are satisfied we then get an up-dated list of approved suppliers.<br><br>(ii) The testing is done by a third party called ITS (Intertek Testing Services), a third party that gets the testing criteria (some of the | MAN 2 – 22<br><br>(i) We have our own people sitting with the garment buyers on the customer's shop floor. They report to me and their task is to ensure that our retail customers get the best possible garment at the lowest price. For instance, if the retail buyers want to source garments from outside suppliers, our people can suggest the best supplier in terms of quality and price. That is how we reduce costs of garments supplied to our customer.<br><br>This allows our retail customers to do one of two things:<br>(a) they can reduce their own margin and get | MAN 3 – 22<br><br>(i) Our cost management with the customer is based on suppliers from which we buy ingredients and packaging. We can only buy ingredients from customer-approved suppliers whose quality and ethical standards satisfy our customer requirements. Thus we do not run the risk of buying ingredients from suppliers whose standards would be rejected by our customer.<br><br>(ii) There is a link between our customer and ingredients suppliers to make sure that we buy from the best suppliers that the |

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| | standards are global) from RET 1. | more business from end-use customers, or (b) they can charge the same price and hence benefit from a higher margin. | customer is happy with.<br><br>(iii) In terms of packaging, again we basically buy our customer-branded packaging, thus there is also a link between our supplier and our customer. Our supplier jointly designs the packaging with our customer. The design they come up with has a bearing on the cost of the packaging.<br><br>(iv) We get involved with the customer to ensure that the package design they come up with is not too expensive because when we buy that packaging, it forms part of our product cost. Thus our involvement is important because without that, we would not have control over the cost of the packaging.<br><br>(v) Our customer and our company use the same transport company to deliver both our inputs and the finished product. For example, a truck picks up chicken from a chicken farm in the Eastern Cape and delivers to our customer's warehouse. We would pick up our chicken from the customer's warehouse using the same transport. The same transport picks up our finished product and delivers it back to the customer warehouse.<br><br>Thus the trucks are always carrying something, resulting in an efficient and cost-effective use of transport. This reduces the transport cost significantly |
| 23 Do your key customers use a strategic cost management approach? Do you encourage your key customers to use strategic cost management? If so, how? | MAN 1 – 23<br><br>I would not know. We do not have much contact with our customer apart from quality-related issues. As I said, our customer tests quality | MAN 2 – 23<br><br>They do if they are to remain competitive. We are always working closely with them, for instance our Designers work with their Merchandisers and | MAN 3 – 23<br><br>Yes they do. We benefit from our customer's well-developed supply chain management function with a highly sophisticated logistical function as discussed |

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| | of prospective suppliers' fabric and trims. This means that we will use good quality fabric and trims, which goes along way in cost reduction. | Buyers to come up with schedules that allow garments to be delivered in a cost-effective way. | above. |
| 24 (a) What are the benefits that accrue to: | MAN 1 – 24 | MAN 2 – 24 | MAN 3 – 24 |
| (i) your company, and | (i) We are assured of business from our customer, hence keeping our production lines busy. This translates into a lower cost per garments due to long production runs. Our profitability improves as a result of lower production costs.<br><br>(ii) Also because our customer does our supplier selection process, we benefit from doing business with suppliers that provide us with high quality fabric and garments. We do not have to spend a lot of money testing the fabric and trims for quality. | (i) Continued business given the fact that our customers, who are our sisters companies within the group, are not compelled to buy garments from us. The group's policy is that the trading companies are free to source garments elsewhere. | (i) We benefit from lower production costs through buying good quality ingredients and packaging from our customer-approved suppliers. In other words, we achieve higher ingredient yields due to buying from excellent suppliers approved by our customer.<br><br>(ii) Also, we use our customer's excellent supply chain management. This translates into an improved bottomline. |
| (ii) your key customers, from the use of strategic cost management with key customers? | (iii) Our customer is assured that we will deliver a good quality garment. This knowledge reduces uncertainty and obvious costs (markdowns for instance) that may arise from poor quality products.<br><br>(iv) Also our customer is assured of delivery on time, again reducing costs of stock-outs. | (ii) Low-priced but high quality garments that result in improved profitability. We supply all our garments to our sister companies at cost.<br><br>(iii) On-time delivery of garments to avoid stock-out costs. | (iii) Good quality products at competitive prices.<br><br>(iv) More business from consumers, which means a more profitable business. |
| (b) How are these benefits measured and communicated to:<br>(i) personnel in the Purchasing department,<br>(ii) personnel in other departments & | (v) Through formal and informal meetings within the company. | (iv) We have weekly and monthly meetings during which we talk about the benefits. | (v) Benefits are measured in terms of cost reduction as shown by variance reports. Communication is done through monthly management reports. |

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| (iii) your key customers? | (vi) Our department has no contact with the customer on such issues. | (v) We discuss these issues on a weekly basis. | (vi) We have weekly, monthly and half-yearly meetings with our customers where we discuss the cost of our products. Our customer knows our input costs. |
| **Strategic Cost Management Tools** | | | |
| 25 Does your company have a set of tools used for strategic cost management? If so:<br>(i) What are they?<br>(ii) How are they used? | MAN 1 – 25<br>(i) Price negotiation with key fabric and trim suppliers.<br><br>(ii) Quality control throughout the garments production processes. | MAN 2 – 25<br>(i) We focus on quality of fabric and trims<br><br>(ii) We also have price negotiation with our fabric and trim suppliers.<br><br>(iii) For imported inputs, we make sure that we contain the landed costs by reducing shipping and costs of foreign currency (hence we buy forward). | MAN 3 – 25<br>(i) Price negotiation with our ingredient suppliers. |
| 25 Are personnel in the Purchasing function trained to use the strategic cost management tools? | MAN 1 – 25<br>We have in-house training where our staff members are trained to deal with cost management. | MAN 2 – 25<br>We train our sourcing personnel on how to perform sourcing functions in the most cost-effective way. Each year we bring in new people who undergo a training program for between one and two years. They learn about the core business and when we feel they are ready, we then give them departments that they have to handle. | MAN 3 – 25<br>We use on-the-job training. |
| **General Strategic Cost Management Issues** | | | |
| 26 Has your company's emphasis on strategic cost management increased/decreased or stayed the same in the last two years? Why? | MAN 1 – 26<br>Yes, due to increased competition over the years. | MAN 2 – 26<br>There is huge awareness of the need for cost management. Cost management is an important part of our business and its importance grows with the growth of the business. | MAN 3 – 26<br>Yes, it is ever increasing due to the competitive nature of the industry. We have to meet the target selling prices of the products we produce; otherwise we are out of business. |
| 27 Do you think supply chain management is viewed as of strategic importance in your company? | MAN 1 – 27<br>(i) Yes it is. In our relationship with suppliers and our customer, there are no boundaries as such. For instance, if we have a problem, sometimes a key supplier can go to RET 1 and represent us about our concerns. In other | MAN 2 – 27<br>(i) Absolutely, because if you don't have a good supply chain, then you don't have business. We are closely monitoring what is happening along the supply chain now than never before.<br><br>(ii) We have a lot of people in the business who value relationships | MAN 3 – 27<br>It is viewed as of strategic importance because our major costs of products come from inputs. It is therefore important to manage these costs through relationships with our suppliers. |

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| | words, there is no 'split' between RET 1, our company and our suppliers. This cuts down on time and problems along the supply chain.<br><br>**(ii)** The management of the relationship between our company and suppliers on one hand and our customer on the other ensures that the right garments are made and delivered on time, at the right price and to the right location. This reduces costs that arise from garments being rejected or orders cancelled because of late delivery.<br><br>**(iii)** As a dedicated supplier to RET 1, we cannot afford to produce garments that we then cannot sell to RET 1 because we have no viable alternative customer. That may mean selling garments at a much reduced price, resulting in loses. Thus strategically, the management of the supply chain is very important.<br><br>**(iv)** Failure to deliver on time may also harm the trust that we have built over the years with our customer. | with suppliers and customers.<br><br>**(iii)** There is also a clear drive from top management for closer relationships with suppliers and customers. | |

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## DATABASE FOR MANUFACTURERS: LOGISTICS FUNCTION INTERVIEW RESULTS

| LOGISTICS DEPT | Supply Chain 1 | Supply Chain 2 | Supply Chain 3 |
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| **Company Name** | MANU 1 | MANU 2 | MANU 3 |
| **Job Title** | Operations Director | Senior Logistics Manager | Chief Executive Officer |
| **Period with Company** | 20 years | 20 years | N/A |
| **Period in Logistics** | 13 years | 10 years | N/A |
| **General Issues** | | | |
| 1 What are the keys competitive issues facing your company? | MAN 1 – 1<br>We really don't have problems with logistics because we are well situated. Our company is close to the airport and major road networks. We import inputs from overseas and easily transport them by road from the Durban harbour. | MAN 2 – 1<br>Our task is to deliver garments to our customers by the required delivery date, in the right quality, on time and at the right price. We are competing against other companies in the same industry. We have to constantly 'sharpen our pencils' to get the right fashionable merchandise at a price that will make our customers smile. | MAN 3 – 1<br>We do not directly deal with logistical issues. Since we are a dedicated supplier, we benefit from our customer's logistical function that takes care of the delivery of our inputs as well as the finished product. |
| 2 Have you re-engineered the Logistics function in the past year?<br>If so, why? | MAN 1 – 2<br>No, we have not. The need has not arisen; we are happy with the way things are. | MAN 2 – 2<br>Yes, we constantly re-engineer our processes in the logistics function to achieve continuous improvement. Wherever we can reduce time, we try to do so. | MAN 3 – 2<br>N/A |
| 3 How is the Logistics function structured in terms of:<br><br>(i) Its organisation?<br><br>(ii) Reporting mechanism? | MAN 1 – 3<br>We do not have a separate logistics department. The logistical issues are under the Operations Director. | MAN 2 – 3<br>There is a senior logistics manager (myself) and then two managers who report to me. One of them looks at fabric administration and the issuing of fabric to our CMT suppliers. The other manager ensures that the CMTs have their cutting orders and they know how many units they have to cut. There is a staff member who is always checking that the claims (from our CMT suppliers) against the fabric orders and against the purchase orders always balance. | MAN 3 – 3<br>N/A |

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| 4 (a) Does the Logistics function have written, specific, quantifiable cost savings/cost management objectives? If so, what are they?<br><br>(b) To who is the Logistics function accountable? | MAN 1 – 4<br>(i) The logistics function is central to everything. Our objective is to make sure that transport costs are kept at a minimum.<br><br>(ii) The logistics function is accountable to the Managing and Finance Directors. | MAN 2 – 4<br>(i) We don't have specific targets as such. However, if we don't reduce our costs, we become expensive to our customers, who can then buy from other suppliers.<br><br>(ii) We continually strive to reduce costs and have efficient and cost effective logistical processes, because if we don't, we are 'dead in the water.' | MAN 3 – 4<br>N/A |
| 5 How is the performance of the Logistics function evaluated? | MAN 1 – 5<br>The performance of the logistics function is based on the results, i.e.<br>(i) how the work flows,<br>(ii) bottlenecks,<br>(iii) the layout of the factory etc. | MAN 2 – 5<br>We are evaluated based on the following:<br><br>(i) On-time delivery of merchandise to our customer's stores<br><br>(ii) On-time ordering of raw materials<br><br>(iii) Efficient movement of raw materials to CMTs<br><br>(iv) Communication with CMTs about when garments are required in our customer's stores.<br><br>All these issues impact on our ability to meet our customer's requirements | MAN 3 – 5<br>N/A |
| **Cost Management Specific to the Logistics Function** | | | |
| 6 How important is cost management within the Logistics function? Why? | MAN 1 – 6<br>Extremely important. You could easily duplicate functions and also affect production (due to poor factory layout), hence the need to achieve maximum benefits from the space available. | MAN 2 – 6<br>Cost management is very important because if we are not efficient, then we lose business. | MAN 3 – 6<br>N/A |
| 7 Where do you focus your cost management efforts within the Logistics function? | MAN 1 – 7<br>(i) We focus our cost management efforts on space utilisation, i.e. maximisation of space utilisation in order to reduce the cost per square metre.<br><br>(ii) We also ensure that we achieve an efficient workflow in the factories by removing bottlenecks along the | MAN 2 – 7<br>We achieve cost reduction through:<br><br>(i) Reducing cost of delivery (transport)<br><br>(ii) On-time delivery of inputs to our company and then to our CMT suppliers. | MAN 3 – 7<br>N/A |

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| | production lines. We do this through, for instance, arranging our Machine Operators in a sequential order according to the operations that are performed on a garment. | | |
| 8 Describe your overall cost management approach within the Logistics function for:<br>(i) New products<br><br>(ii) Existing products | MAN 1 – 8<br><br>We focus on efficient workflow to make sure that it does not hamper the work of operators.<br><br>As above. | MAN 2 – 8<br><br>All our products are new because we are in the fashion industry. Thus our focus is on the on-time procurement of inputs – fabric and trims in order to reduce costs caused by delays in the production process. | MAN 3 – 8<br><br>N/A |
| 9 What is the Logistics function's responsibility for cost of products produced? | MAN 1 – 9<br><br>Costs that result from poor workflow within our factory. | MAN 2 – 9<br><br>On-time delivery of inputs to:<br>(I) Our company<br>(II) Our CMT suppliers | MAN 3 – 9<br><br>N/A |
| 10 Are personnel in the Logistics function held individually responsible for cost variances of products produced? | MAN 1 – 10<br><br>We do not have personnel dedicated to logistics. The Operations Director does this function. We do not calculate any cost variances. | MAN 2 – 10<br><br>(I) Yes, we do performance management appraisals of all the people who report to me. We focus on the costs caused by failure to perform tasks on time, resulting in delays in the delivery of inputs. I am in turn accountable to the Operations Director for the overall performance of the logistics function.<br><br>(II) We debate issues related to the logistics within the department and with other departments. Through the constant re-engineering of our logistical processes, we achieve efficiency in our operations. | MAN 3 – 10<br><br>N/A |
| 11 Are the cost variances for products produced tied-in to the reward system within your company? | MAN 1 – 11<br><br>N/A | MAN 2 – 11<br><br>No they are not. | MAN 3 – 11<br><br>N/A |
| 12 What are the cost variances of products produced compared to? | MAN 1 – 12<br><br>N/A | MAN 2 – 12<br><br>(I) The finance department generates monthly cost variances. These are then compared to the budget and I get to know how we are doing. | MAN 3 – 12<br><br>N/A |

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| | | (ii) Where the reports show that we are spending more than the budget or there are costs caused by our failure to act on time, we focus our attention to find ways of doing things more efficiently thereby reducing costs. | |
| 13 What is the role of the Logistics function in the:<br><br>(i) Development of an understanding of key customer needs?<br><br>(ii) Development of an understanding of customer value proposition within your company? | MAN 1 – 13<br><br>We ensure that we have an efficient workflow that enables our company to deliver garments required by our customer on time.<br><br>As above. | MAN 2 – 13<br><br>We continually meet with our customers with a view to making them smile. If there is something that goes wrong with a purchase order for instance, we have to go to the customer to find out what went wrong. In other words, we try to find out whether our expectations are in synch. We continuously strive to improve our relationship with the customer.<br><br>As above. | MAN 3 – 13<br><br>N/A |
| 14 What key cost drivers does the Logistics function manage within your company? | MAN 1 – 14<br><br>(i) The efficient delivery of fabric through the Cutting Room areas<br><br>(ii) On-time delivery of inputs and<br><br>(ii) Space utilization i.e. ensuring that we effectively and efficiently use the space available in the factories. | MAN 2 – 14<br><br>(i) Transport costs<br>We try to manage our transport costs because they form part of the garment cost. We reduce costs by bulk-buying.<br><br>(ii) On-time delivery of inputs<br>Late deliveries of inputs disrupt our production lines, resulting in costs of idle time, i.e. downtime | MAN 3 – 14<br><br>N/A |
| **Structure of Cost Management Efforts within the Logistics Function** | | | |
| 15 Who drives cost management within the Logistics function? Please explain the nature of their responsibility | MAN 1 – 15<br><br>The Operations Director drives the cost management within the logistics function. The responsibilities of the Operations Director are to ensure that work flows smoothly and space is utilised to the maximum. | MAN 2 – 15<br><br>The Senior Logistics Manager through ensuring on-time delivery of inputs (to our company and our CMT suppliers) and garments | MAN 3 – 15<br><br>N/A |

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| 16 How is the Logistics function integrated into your company's overall cost management efforts? | MAN 1 – 16<br>The logistics function is not effectively integrated into the rest of the company's overall cost management efforts. At the moment we focus on making people comfortable in their workstations so that they work productively. | MAN 2 – 16<br>We have the following functions: logistics, production, finance, quality control, human resources & shipping. We all work in our specialist areas but there is enough interaction between these functions. | MAN 4 – 16<br>N/A |
| 17 How is the Logistics function held accountable for cost management? | MAN 1 – 17<br>Accountability for cost management is in terms of the budget set up for each project, i.e. results should be achieved within the project budget. | MAN 2 – 17<br>We are held accountable for costs arising from late deliveries of inputs. | MAN 4 – 17<br>N/A |
| 18 What other functions does the Logistics function interaction with in your company? Please describe the nature of the interaction. | MAN 1 – 18<br>Production, Finance, Sales & Marketing and Purchasing. Our interaction is at the Executive Team level. | MAN 2 – 18 | MAN 4 – 18<br>N/A |
| 19 Do you believe your company takes a total supply chain perspective to cost management? If you believe so, please explain how. If not, please explain why not. | MAN 1 – 19<br>We do not. As I said earlier, our main focus at the moment is internal. | MAN 2 – 19<br>(I) We take supply chain in our business very seriously. This applies to MANU 2 as well as at group level. Our head office takes a keen interest in how best we can serve the customer.<br><br>(II) We also involve our customers in debating the best way of ensuring that garments are supplied on time. | MAN 3 – 19<br>N/A |
| 20 Do you benchmark cost management practices in the Logistics function against other companies in the industry? | MAN 1 – 20<br>We do not benchmark cost management within the logistics function because we are still focusing on improving what we are doing within our company. | MAN 2 – 20<br>We don't benchmark our cost management within the logistics function against other companies in the industry because of the level of secrecy in the industry. Our competitors do not tell us their costs but indirectly, we can compare our costs because if we were not competitive in our cost structure, we would be out of business. | MAN 3 – 20<br>N/A |

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| Supply Side Cost Management Issues | | | |
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| 21 How do your company and particularly the Logistics function use strategic cost management with key suppliers? Is there a model that is always used in all circumstances? | MAN 1 – 21<br>N/A | MAN 2 – 21<br>(I) We ensure that our CMT suppliers have their cutting orders on time.<br>(II) We communicate with our fabric and trim suppliers to make sure that they supply us on time. | MAN 3 – 21<br>N/A |
| 22 Do your key suppliers use a strategic cost management approach? Do you encourage your key suppliers to use strategic cost management? If so, how? | MAN 1 – 22<br>N/A | MAN 2 – 22<br>We do not know. | MAN 3 – 22<br>N/A |
| 23 (a) What are the benefits that accrue to:<br>(i) your company, and | MAN 1 – 23<br>N/A | MAN 2 – 23<br>(I) More business from our customers. If we get things right, we will make more customers come to the RET 2 group stores to buy our products because:<br>(a) we are quicker to bring new garments to the stores than our competitors<br>(b) we are able to produce quality garments at competitive prices. | MAN 3 – 23<br>N/A |
| (ii) your key suppliers, from the use of strategic cost management with key suppliers? | | (II) Our CMT suppliers are happy to work with us because we are tightly controlled. We give them a package to make the garments – all the trims, all the fabric, all the markers, all the cutting orders – all the things they need to make garments. As soon as they go to other customers to get work, they complain a lot because they do not get the same package like we give them. As a result, they love us, and we love them because we cannot exist without them. It is a joint thing; it is a co-operation. | |
| (b) How are these benefits measured and communicated to:<br>(i) personnel in the Logistics department,<br><br>(ii) personnel in other departments and | | (III) The benefits are measured in terms of<br>(a) store growth,<br>(b) the profitability of the RET 2 group and<br>(c) the proportion of merchandise that our | |

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| | | customers buy from us rather than from outside suppliers.<br><br>(iv) These benefits are mostly communicated through group annual financial reports. | |
| (iii) your key suppliers? | | (v) We communicate benefits to our suppliers through monthly meetings. We tell them both the good and the bad news. We are open to our CMT suppliers to make sure that they understand that we are not after reaping them off; we show them that we have nothing to hide. | |
| **Demand Side Cost Management Issues** | | | |
| 24 How do your company and particularly the Logistics function use strategic cost management with key customers? Is there a model that is always used in all circumstances? | MAN 1 – 24<br><br>(i) We instil confidence to the customer that we have a good workflow that will ensure that garments are manufactured on time.<br><br>(ii) Also health and safety concems are addressed to meet the requirements of our customer. | MAN 2 – 24<br><br>(i) We try to make sure that the retail outlets do not have too much stock such that they end up having markdowns. Thus we carefully plan stock delivery into stores. We achieve this by working with Stock Planners in our customer's stores.<br><br>(ii) In terms of delivery, we make sure that we stick to the agreed delivery dates. We have a very sophisticated system that ensures that garments are delivered as close as possible to the style accumulation date in the warehouse. | MAN 3 – 24<br><br>Our customer has a very sophisticated logistical function that allows us to get our inputs on time and delivery the finished products on time as well. We arrange schedules in such a way that when our customer's trucks come to collect the finished products, they also bring us our inputs. This facilitates the efficient utilisation of the trucks and leads to significant cost reductions. |
| 25 Do your key customers use a strategic cost management approach? Do you encourage your key customers to use strategic cost management? If so, how? | MAN 1 – 25<br><br>N/A | MAN 2 – 25<br><br>(i) As far as logistics is concerned, our customer has a merchandise delivery calendar that we follow. Consequently, we avoid too much stock in stores and at the same time we also avoid stock outs.<br><br>(ii) We work together on a daily basis and collectively seek cost-effective ways of garment delivery. | MAN 3 – 25<br><br>Yes, as explained above. |

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| 26 (a) What are the benefits that accrue to:<br>(i) your company, and | MAN 1 – 26<br>N/A | MAN 2 – 26<br>(I) We get more business from our customer. Since we are a cost centre, our benefits are not measured in terms of profit. | MAN 3 – 26<br>As explained in question 24 above. |
| (ii) your key customers, from the use of strategic cost management with key customers? | | (II) Our customer gets good quality garments on time. On-time delivery is key in ensuring that stores do not miss sales opportunities.<br><br>(III) Being able to meet end-use customer demand improves our customer's bottom line. | |
| (b) How are these benefits measured and communicated to:<br>(i) personnel in the Logistics department,<br>(ii) personnel in other departments &<br>(iii) your key customers? | | (IV) Benefits from our side are measured in terms of the percentage of RET 2's garments that we supply. That is used to indicate the extent of our business growth with the customer.<br><br>(V) From the customer's side, benefits are measured in terms of improved profitability as a result of the garments that we supply.<br><br>(VI) Benefits are communicated at a group level through profitability statements. | |
| **Strategic Cost Management Tools** | | | |
| 27 Does your company have a set of tools used for strategic cost management? If so:<br>(i) What are they?<br>(ii) How are they used?<br>(ii) Which tools does the Logistics function find most useful? | MAN 1 – 27<br>N/A | MAN 2 – 27<br>We do not have specific tools as such. | MAN 4 – 37<br>N/A |
| 28 Are personnel in the Logistics function trained to use the strategic cost management tools? | MAN 1 – 28<br>N/A | MAN 2 – 28<br>N/A | MAN 4 – 38<br>N/A |

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| General Strategic Cost Management Issues | | | |
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| 29 Has your company's emphasis on strategic cost management increased/decreased or stayed the same in the last two years? Why? | MAN 1 – 29<br>N/A | MAN 2 – 29<br>(i) The emphasis has increased because retail has had a hard time in South Africa in the past three years.<br><br>(ii) Obviously if people are not buying our products, there are two things we have to look at:<br>(a) Have we put the right merchandise in the shops (have we got the right garment buyers and is our process right to put the right goods in the shops)?<br>(b) Are our costs too high – and there has been a huge emphasis on tightening our processes to reduce costs? | MAN 4 – 39<br>Emphasis has increased due to competitive pressures facing our customer. |
| 30 Do you think supply chain management is viewed as of strategic importance in your company? | MAN 1 – 30<br>N/A | MAN 2 – 30<br>(i) We look at the supply chain as of paramount importance. This is because if the supply chain is not properly managed, then you don't have business.<br><br>(ii) You may end up bringing say winter clothes close to the end of the winter season and then you sit with huge quantities of garments that are not selling. That means you have wasted a lot of money – you have lost it – all that money can't be recovered. | MAN 3 – 30<br>Yes, that is why we work closely with our suppliers and customer. |
| 31 Do you think the way supply chain management is viewed in your company has an impact on the success of cost management efforts? | MAN 1 – 31<br>N/A | MAN 2 – 31<br>(i) Yes, we say that as a general rule, the slicker your operation is, the better the cost benefit you get out of it.<br><br>(ii) Time means money, so we are<br>(a) continuously shortening the time to market,<br>(b) we are doing things more efficiently,<br>(c) we are re-looking at all our processes, staffing and cost etc. | MAN 3 – 31<br>Yes, working closely with our customer in logistical issues impacts positively on cost reduction. |

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| 32 Are there any other issues regarding strategic cost management (within your company, Logistics function, your key suppliers and customers) that you would like to talk about? | MAN 1 – 32<br>N/A | MAN 2 – 32<br>No. | MAN 3 – 32<br>No |

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## DATABASE FOR MANUFACTURERS: PRODUCTION FUNCTION INTERVIEW RESULTS

| PRODUCTION DEPT. | Supply Chain 1 | Supply Chain 2 | Supply Chain 3 |
|---|---|---|---|
| **Company Name** | **MANU 1** | **MANU 2** | **MANU 3** |
| | Clothing | Clothing | Food |
| **Job Title** | **Operations Director** | **Senior Production Manager** | **Operations Director** |
| **Period with Company** | 20 years | 7 years | 14 years |
| **Period in Production** | 7 years | 7 years | 11years |
| **General Issues** | | | |
| 1 What are the keys competitive issues facing your company? | MAN 1-1<br><br>(I) Lack of skills in the lower levels of the production department.<br><br>(ii) Competition from other manufacturers, which is worsened by unfair labour practices from the Labour Unions. We face unfair competition against companies in the North of the country because they have more power against labour unions. These companies can easily relocate their operations to our neighbouring countries, which we cannot easily do. Thus wages in the Western Cape are higher than wages paid by companies in the North of the country.<br><br>(iii) There is lack of expertise in the local supply base as far as certain raw materials are concerned, e.g. silk.<br><br>(iv) Shipping problems due to overseas suppliers giving priority to orders placed by companies in USA & UK. This is because African orders are smaller compared to those of other parts of the world. | MAN 2 - 1<br><br>Key competitive issues that we face are competition from manufacturers who are based in rural areas where they pay lower wage rates than in urban areas. | MAN 3 - 1<br><br>(i) Our key competitive issue with regard to production is that we are producing products that have a short-shelf life, i.e. perishable goods. We get our orders on the day or a day before delivery. All the production we do, we start from scratch in the morning and we have to deliver in the evening. Thus because we are in the fast consumer goods environment, we have to deal with:<br>(a) short lead times and<br>(b) flexibility in production. Decisions have to be made quickly in the production function to ensure that orders are delivered by between 5pm and 7pm on the day we produce the goods. |

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| | (v) Lack of exposure to the latest production facilities hence overseas competitors are ahead in terms of technology. Most of the latest production machinery has to be imported, which in turn makes our merchandise relatively expensive compared to our overseas competitors. | | |
| 2 Have you re-engineered the Production function in the past year? If so, why? | MAN 1 – 2<br><br>Yes. We introduced time study and computer system that tracks production. We wanted systems that enhance operations and job satisfaction in order to be competitive. Time study in the workstudy section enables us to continuously improve our operations. We achieve this by continuously reviewing our garment-making standard times in the factory. | MAN 2 – 2<br><br>We change our production processes continuously based on what the customer demands. We have not done any major re-engineering as such. | MAN 3 – 2<br><br>(I) We have made a lot of changes in production due to growth in our business. We are trying to simplify the production function by allocating the production of certain goods in particular factories. For example, before 2000, we used to make soup and salads in the same factory. We are now making them in separate factories to facilitate production planning because we are now focusing on similar products in each factory.<br><br>(II) Also given the increase in volume of our business, instead of making one factory larger and larger, it is easier for us to use separate factories to keep the volumes dealt with in each factory at medium size. The idea is to decrease the product mix in each factory in order to simplify the production planning. Thus in a simplified form, we are doing more of less, whereas in the past we were doing less of more.<br><br>(III) We are also in the process of building another factory to further simply the production processes. For example, at the moment we are doing soup and recipe dish meals in one factory and we are going to take out the recipe dish meals to the new factory. That simplifies the processes |

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| | | | to enable us to increase the production of each product without increasing complexity in the factories. This also enhances our productivity. |
| 3 How is the Production function structured in terms of: | MAN 1 – 3 | MAN 2 – 3 | MAN 3 – 3 |
| (i) Its organisation? | (I) The Operations Director heads the Production function, and below him are production managers, supervisors and then machine operators. | (I) We have a senior production manager (myself) and below me a factory manager (technical trouble shooter) who spends 90 % of his time in the cut make and trim (CMT suppliers) factories. Below the factory manager is a team of five people who coordinate a number of factories in terms of ensuring that the factories receive their components on time, and that they deliver to us complete garments on time. | (I) There are four different factories – 1 to 4. **Factory 1** is the fruit juice operation, **Factory 2** is the soup and recipe meals, **Factory 3** is prepared vegetable and takeaway foods (sandwiches and hamburgers), and **Factory 4** (under construction) will be for recipe dishes, new business coming in, i.e. pizzas and quiche. |
| (ii) Reporting mechanism? | (II) The machine operators report to the supervisors, who report to the production managers and who in turn report to the Operations Director. | (II) The trims buying function reports to me and the workstudy function reports to the pre-production department. The pre-production department reports to me. | (II) Each factory has a production manager, and area supervisors, team leaders and then the various teams of staff. There is also a factory technologist who services the production function but reports to the business technical manager. Under the factory technologists are quality controllers, who report to the factory technologist. All production managers report to the operations director. The technical manager reports to the managing director. |

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| 4 Does the Production function have written, specific, quantifiable cost savings/cost management objectives? If so, what are they? | MAN 1 – 4<br><br>Yes. The production function is cost driven. Cost management is set in terms of<br>(I) time (Std Mean Value) and<br>(II) quality of garments to be produced (efficiencies). | MAN 2 – 4<br><br>We certainly do.<br>(I) In terms of our buying function, we try and negotiate competitive prices with our meaningful suppliers.<br>(II) We also continuously review our workstudy database to facilitate re-engineering garments in such a way as to keep the minute content (labour content) as low as possible without affecting the appearance of the garments.<br><br>(II) Cost reduction is achieved by gradually reducing our allowable time per garment-making operation based on employee experience and training. We use the actual time where we have achieved efficiencies to set the allowable time. This way our costs continuously go down as labour content goes down. | MAN 3 – 4<br><br>(I) Our cost reduction objectives are focused on the efficient managing of the direct cost of production arsing from:<br>(a) Ingredients<br>(b) Packaging<br>(c) Labour<br>(d) Transport<br><br>(II) We do not hold factory managers accountable for transport cost because they do not have control over it. Their targets are set in terms of ingredients, labour and packaging costs. |
| 5 How is the performance of the Production function evaluated? | MAN 1 – 5<br><br>Performance is evaluated in terms of units of production achieved in the set time (Std Mean Values). This is on average between 65% and 75%. | MAN 2 – 5<br><br>(I) The production function is evaluated on how we perform in terms of:<br>(a) quality performance and<br>(b) on-time delivery of garments. | MAN 3 – 5<br><br>(I) We look at the cost of ingredients (ingredients make up 40% to 60% of the product cost) and to what extent production managers are able to utilise the ingredients in the most efficient way, i.e.<br>(a) reduce waste and<br>(b) getting the maximum yield from the ingredients. The reduction of waste and maximisation of ingredient yields impact positively on our bottomline.<br><br>(II) We also run competitions between factories. If a factory reaches its set target on labour cost reduction, all the staff in the factory get a bonus commensurate with the cost reduction. |

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| | | | (iii) Quality is another measure that is important in our business. Quality testing is done to all our products on weekly basis by quality controllers. The results are fed through to the technical manager. We focus on avoiding the production of poor quality products.<br><br>If there are any end-use customer complaints that come through from our customer (retailer), they get fed back into the factory, right down to the staff on the production line. A report is written by the staff on the line explaining what happened. |
| **Cost Management Specific to the Production Function** | | | |
| 6 How important is cost management within the Production function? Why? | MAN 1 – 6<br><br>(i) Cost management is extremely important because it has a bearing on our competitiveness.<br><br>(ii) Here we look at how we are using our personnel and machines in the most efficient way in the process of producing garments. | MAN 2 – 6<br><br>(i) It is pretty important. You know there are a number of factors that are important; it's difficult to accentuate to the importance of one particular factor.<br><br>(ii) However, it is certainly and clearly very important because if we don't control our costs, then we become uncompetitive, and when we are not competitive, we don't get the business. | MAN 3 – 6<br><br>(i) It is extremely important because it makes a big difference to our bottomline. We don't have a fat margin on our products that we can play around with.<br><br>(ii) Up until now, cost management in the production function has not been driven hard enough – it has not been linked to performance. We have hired a Cost Accountant in the factories to assist us with cost driver analysis and ways of reducing costs.<br><br>The Cost Accountant's role is to service to us to show us our historical achievement and the specific areas where we can make a difference and how we can achieve that. Thus the Cost Accountant will be on the factory floor with us everyday, understanding operations and processes so as to generate meaningful cost information for us. |

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| 7 Where do you focus your cost management efforts within the Production function? | MAN 1 – 7<br>We focus on:<br>(i) efficiency (time) and<br>(ii) capacity utilisation (number of operators and machines working in the factory).<br><br>(iii) Less time spent on a garment translates into cost reduction. The more factory capacity we utilise, the lower the cost of production. | MAN 2 – 7<br>We achieve cost savings by concentrating on:<br>(i) the labour content of the garment, (in terms of garment engineering, i.e. how complex the garment is to make, which impacts on the labour content) as well as<br>(ii) the procurement of high quality fabric and trims.<br><br>Those are the two biggest areas because those are the areas where we achieve significant cost savings. | MAN 3 – 7<br>Our cost management effort is directed towards<br>(i) labour,<br>We focus on efficiency and better utilisation of labour, which results in labour cost reduction.<br>(ii) ingredients and<br>(iii) packaging.<br>On ingredients and packaging, our focus is on efficient usage and getting the best yields. Our ingredient and packing costs go down as a result. |
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| 8 Describe your overall cost management approach within the Production function for:<br><br>(i) New products | MAN 1 – 8<br><br>(i) We focus on planning – cost of raw materials, time and labour (in terms of meeting the changing customer requirements). | MAN 2 – 8<br><br>(i) Skilful engineering of the new product, i.e. coming up with a cost-effective garment design.<br><br>(ii) Meaningful reduction of the labour content of the new product without affecting the performance and appearance of the garment. Training of factories employees and taking advantage of experience achieved over the years allow us to reduce our labour cost.<br><br>(iii) In terms of new trims, we are constantly looking for new trim suppliers. However, we don't chop and change suppliers; we believe that we have got to have a meaningful relationship with our suppliers. We have to be important enough to our suppliers to have meaningful negotiation with them regarding prices.<br><br>(iv) It's on-going negotiation with suppliers and bulk-buying to benefit from discounts.<br><br>(v) Also continual fine-tuning of the | MAN 3 – 8<br><br>(i) New products are developed in the product development centre (PDC). Before the product gets to the factory, it is costed, and the ingredients yields calculated and the packaging decided upon. This is done to see whether the product will achieve the desired selling price as required by our customer. If it does not achieve the target selling price, we re-engineer the product to meet the price or agree with the customer to sell the product at a higher price.<br><br>(ii) The process of making the product, checking quality, costing it and re-engineering, takes between 6 months up to a year to achieve the desired or target selling price. We will not allow the product to get to the factory until all this has been done and we are satisfied that we will achieve the target selling price at the right quality.<br><br>(iii) The product is then handed over to a product development technologist (PDT) who reports to a product development manager |

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| | | manufacturing base to ensure that we are as efficient as possible to keep the costs down. Since we don't use our own labour (the making of the garments is done by CMTs), we maintain workstudy presence in their factories, focusing on efficiency, i.e. we have our workstudy personnel in our CMT suppliers' teams. The CMTs also ensure that their labour is efficient for their own profitability and pass on some of the benefits to us, thereby ensuring that we continue supplying them with work. | (PDM). The PDM decides in which factory the product will be produced, as well as scheduling the production of the product. The process requires about three sessions during which the PDM trains the production personnel how to make the product as follows:<br><br>**(a) Session 1**<br>• Understanding the recipe<br>• factory trial 1 (one)<br>• factory trial 2 (two) after two weeks of the initial trial.<br><br>**(b) Session 2**<br>About 4 weeks after factory trial 2, pre-production takes place.<br><br>**(c) Session 3**<br>After pre-production, then product launch occurs. By this time the factory personnel know how to make the product efficiently, reaching the required yields on ingredients. At this point, the product gets handed to the factory and becomes a product that we produce on a daily basis. By this time, we are satisfied with the quality and cost of the product. Hence the importance of training staff during these sessions. |
| (ii) Existing products | (II) We concentrate on reducing the labour content in the cost of garments. This is achieved by using our experience and continuous improvement through the workstudy. We reduce the standard time allowable per garment-making operation in line with our machinists' experience. As a result, the labour cost, and hence garment costs, go down. | | (Iv) For existing products we focus on the information generated in the monthly management accounts to give us a guide as to where we need to reduce costs.<br><br>(a) We give a lot of attention to the cost of ingredients because they constitute the bulk of the product costs.<br><br>(b) We look at the wastage factor, the utilisation of the ingredients to achieve the best yields in line with the pre-production estimates that formed |

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| | | | the estimated cost of the product.<br><br>(c) The management of the product mix also is very important, as well as the ability to adapt to the constant changes to the recipes of our products. Our products are not produced for too long before the recipe changes due to changes in end-use consumer tastes. This happens once a year and the costing and product development processes have to be changed based on the new recipe, new cost structure and new margins. The life span of our products is between a year and 18 months and then a change occurs. We know that end-use customers expect a better product each time.<br><br>(d) Therefore we are constantly changing our recipes, refining them by removing additives, making them tastier, and using healthy and fresher ingredients. Two years ago we could have used any poultry product but now we only use grain-fed poultry. We have very demanding end-use customers who want an improved product year after year, so we keep improving our products year after year. |
| 9 What is the Production function's responsibility for cost of products produced? | MAN 1 – 9<br><br>(i) The Production Manager is held responsible for the cost of merchandise produced. Machine Operators are individually held responsible for :<br>(a) efficiency &<br>(b) quality of garments | MAN 2 – 9<br><br>The production of required garments on time at the right quality and price. | MAN 3 – 9<br><br>The production of good quality products at competitive prices. We have to meet the target selling price as required by our customer. |
| 10 Are personnel in the Production function held individually responsible for cost variances of products produced? | MAN 1 – 10<br><br>Yes. Disciplinary action is taken against poor performers. This is facilitated by the preparation of variance reports that | MAN 2 – 10<br><br>Yes they are. When a designer designs a garment, the components of the garment that the production is | MAN 3 – 10<br><br>Not yet. However, we will implement a performance evaluation system once the Cost Accountant starts producing detailed and |

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| | show losses per machine operator. | responsible for are the trims. The designer specifies what trims must be sourced at the same or better price than the designer has specified. This is done on a regular basis. | focused reports for us. |
| 11 Are the cost variances for products produced tied-in to the reward system within your company? | MAN 1 – 11<br><br>Cost variances are not really tied to the reward system. However, as I said earlier, poor performers are disciplined . | MAN 2 – 11<br><br>The cost variances are so small and hence not tied to the reward system. | MAN 3 – 11<br><br>Not at this stage. We will do this later once the Cost Accountant is fully engaged in the factories. |
| 12 What are the cost variances of products produced compared to? | MAN 1 – 12<br><br>We compare these variances as follows:<br><br>(i) Variances per line in a given period against the same period the previous month.<br><br>(ii) Variance per machine operator in a period against that operator's performance in the previous period.<br><br>(iii) Variances per garment style in a period against the same style in the previous period. | MAN 2 – 12<br><br>We compare the actual cost of the garment once it's produced, to the sold price of the garment. We always try to beat the sale price of the garment. | MAN 3 – 12<br><br>Variance analysis is done as follows:<br><br>(i) This month's result versus the previous month's result<br><br>(ii) This month's result versus the same month of the previous year.<br><br>(iii) This month's result versus the budget set for that month.<br><br>(iv) We express all the variances as a percentage of the turnover.<br><br>(v) The interpretation of the cost variances depends of the season of the year due to changes in the product mix in the factory.<br><br>For example in factory I that produces soups and recipe dishes, during winter soup volume increases and recipe dishes decrease. The cost of labour goes down, as well as the cost of ingredients and packaging because that is the nature of the product. In the same factory, when the soup volumes are low and the recipe dishes are high, the cost of labour, packaging and ingredients go up and the margin goes down, and that is acceptable because that is the nature of the product.<br><br>Thus you need to know what your product |

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| | | | mixes are in the same factory throughout, as well as from factory to factory. |
| 13 What is the role of the Production function in the: | MAN 1 – 13 | MAN 2 – 13 | MAN 3 – 13 |
| (i) Development of an understanding of key customer needs? | The production function liases with technologists to achieve:<br>(i) standards set by customers<br>(ii) delivery dates and times<br>(iii) good quality merchandise | (i) We are there to interpret what the customer wants. We are there to service the customer; to service the customer in a better way. | (i) Not very much. This is the role of our product development team and our technical team. The technical team ensures that the quality of the product satisfies the customer needs. The product development team ensures that the product being developed meets the customer expectations. |
| (ii) Development of an understanding of customer value proposition within your company? | (iv) We work towards the development of a culture of working with the customer to share common visions. This is achieved through joint workshops with our key customer and involves employees from different departments. | (ii) We ensure that what has been ordered is received on time and is of good quality and better than our competitors' products. | (ii) The production function has an indirect (internal) responsibility to meet the quality standards set by the technical team and to meet the quality standards (tastes and flavour) of the new and existing products set by the product development team. |
| 14 What key cost drivers does the Production function manage within your company? | MAN 1 – 14<br>(i) Capital investment (size of investment)<br>(ii) consumables,<br>(iii) machines & equipment, and<br>(iv) repairs | MAN 2 – 14<br>(i) Purely we have got to keep our headcount to a minimum without stretching people to the point where they become inefficient.<br><br>(ii) In terms of our input costs, we have to keep our trims buy as efficient as possible. We have to bulk-buy whenever we can to reap the benefits of bulk discounts.<br><br>Those are the main two components that go into the cost of garments.<br><br>(iii) Clearly another major cost is what we pay to our suppliers (CMTs) to produce for us and we control that by continual and regular maintenance of our labour costing database in the workstudy section. We use the workstudy data to set the allowable time that our CMT suppliers should take to make a particular garment style. | MAN 3 – 14<br>Our cost drivers are<br><br>(i) ingredients,<br>(ii) packaging,<br>(iii) labour,<br>(iv) factory consumables (chemicals, cleaning materials), and<br>(v) repairs and maintenance of machinery. |

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| | | The data reflect the efficiency levels that are expected, depending on the garment style and newness of the garment. The data is updated by observing our CMT machinists working in the factories. | |
| **Structure of Cost Management Efforts within the Production Function** | | | |
| 15 Who drives the cost management practices within the Production function? Please explain the nature of their responsibility | MAN 1 – 15<br>Cost management practices are driven by the Operations Director through monthly reports. These reports are compared to budgets. | MAN 2 – 15<br>Cost management within MANU 2 is achieved through teamwork. Everyone in the departments is expected to come up with ways of reducing our costs. | MAN 3 – 15<br>Production managers drive cost management within factories. It is however, not done on a set basis at the moment. It is done on an open discussion but soon we will move to a formal way of cost management. |
| 16 How is the Production function integrated into your company's overall cost management efforts? | MAN 1 – 16<br>This is achieved through the Executive Team meetings. These meetings comprise purchasing, sales, production and finance. We work as a team to deal with problems affecting our company. | MAN 2 – 16<br>The production department is divided into two informal divisions; the sourcing and the manufacturing divisions. The sourcing division sources fully made- up garments. In terms of manufacturing, fabric and all the various garment components are procured for a style and the manufacturing division puts together that style and manufacture it. Thus the pre-production department, logistics and the finance departments service the production department. | MAN 3 – 16<br>The production function liaises with the product development and technical managers, as well as the finance function (as stated earlier). We also work with the purchasing managers in the company to ensure that we get the best ingredients in terms of quality and price. |
| 17 How is the Production function held accountable for cost management? | MAN 1 – 17<br>Accountability for cost management is done through budgets, i.e.<br>(i) cost of production<br>(ii) people employed per operation<br><br>The focus here is on increasing efficiency and capacity utilisation as a way of reducing costs. | MAN 2 – 17<br>We are accountable for the quality of products produced as well as cost savings through the reduction of labour time in the factories. | MAN 3 – 17<br>We are held accountable for cost management through the reports that are produced by the Finance department. Our task is to ensure that we minimise the cost of ingredients, labour and packaging. |
| 18 Do you believe your company takes a total supply chain perspective to cost management? If you believe so, please explain how. If not, please explain why not. | MAN 1 – 18<br>Yes, although I think we could do better. This is because we could leverage our size to negotiate favourable prices | MAN 2 – 18<br>Very much so. We do regular cost comparison with our competitors. We are a cost centre to the RET 2 group so we sell to RET 2 at cost, | MAN 3 – 18<br>Yes we do. We work closely with our suppliers (both packaging and ingredients) and our customer in the process |

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| | with suppliers and good quality inputs. I feel that at the moment we are not utilising our muscle to get better deals from our suppliers. | and that enables the group to be competitive. Also we continually compare our garment costs with the outside suppliers who also supply to RET 2, and try to beat their prices. | of delivering a high quality product to the end-use customer. |
| 19 Do you benchmark cost management practices in the Production function against other companies in the industry? | MAN 1 – 19<br>No. We cannot get the information with which to compare our costs. | MAN 2 – 19<br>Not that I know of. We benchmark our cost management against budget. We try to achieve a lower actual garment cost. | MAN 3 – 19<br>We don't benchmark our cost management practices against other companies. This is because we are a dedicated supplier to our customer. We therefore don't share information with other manufacturers. |
| **Supply Side Cost Management Issues** | | | |
| 20 How does your company, and particularly the Production function use strategic cost management with key suppliers? Is there a model that is always used in all circumstances? | MAN 1 – 20<br>(I) We negotiate the prices of inputs with our suppliers.<br><br>(II) Our machine suppliers provide us with technical assistance to enable us to better use machines we buy from them. This takes the form of supplier technicians who come and work with our own technicians.<br><br>(III) Also our machine suppliers give us free courses on their products and recommend better machines for specific garments. The training and assistance that we get enable us to efficiently use these machines, resulting in cost reduction | MAN 2 – 20<br>We achieve cost management with suppliers through<br>(I) bulk buying, and<br><br>(II) the establishment of an important relationship with them. We try not to buy little bits from a lot of suppliers. We try to rationalise our supply base so that our buy off our suppliers becomes meaningful buy; that we are important to them. That then becomes a strong relationship where the two parties can talk to one another and negotiate from position of strength.<br><br>(III) Also our suppliers at times get involved in our product development from time to time, especially those that manufacture inputs specifically for us. | MAN 3 – 20<br>The interaction with our suppliers is done through our buying team. It is the responsibility of the buying team to ensure that we have adequate ingredients and packaging all the time. Thus we do not have direct interaction with our suppliers. |
| 21 Do your key suppliers use a strategic cost management approach? Do you encourage your key suppliers to use strategic cost management? If so, how? | MAN 1 – 21<br>Yes, they have to manage their costs in order to do business with us. We encourage our suppliers in that we tell them that if they value our business, they should become cost effective. | MAN 2 – 21<br>Our CMT suppliers use cost management by focusing on cost efficiency within their factories. We also assist them to achieve cost efficiency by profiling merchandise into their factories correctly, and hence maximise production runs whenever we can. This is achieved by ensuring a continual and uninterrupted supply of work to them. | MAN 3 – 21 |

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| 22 (a) What are the benefits that accrue to: | MAN 1 – 22 | MAN 2 – 22 | MAN 3 – 22 |
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| (i) your company, and | (I) Increased profitability through lower cost of inputs<br><br>(II) Better and more Investment. Due to the advice and technical assistance that we get from our suppliers, we have focused our capital expenditure in areas that really matter. Our objective is to increase productivity and we have achieved that.<br><br>For instance, we used to have hand bagging and now the process is fully automated. Also in our cutting department, the process is now fully automatic. The result has been increased production with the same number of people, i.e. high productivity. | (I) Clearly the major benefits are that we are a competitive supplier through cost reduction<br><br>(II) We have managed to expand and maintain the business we have with our customer. This makes us a growing and more profitable company. | (I) We achieve costs reduction due the good quality inputs that we buy from our suppliers. |
| (ii) your key suppliers, from the use of strategic cost management with key suppliers? | (III) Increased profitability through increased volume of sales and lower costs. | (III) The benefits to our key suppliers are that they are a vibrant and growing business. | (II) They get more business from us. |
| (b) How are these benefits measured and communicated to:<br>(i) personnel in the Production department, | (Iv) Benefits are measured in terms of:<br>(a) production volumes,<br>(b) savings on consumables and<br>(c) efficiencies on labour.<br><br>They are communicated through the Executive Team meetings. | (Iv) Benefits are measured by the dividends we pay to our shareholders and by the profitability of the group as a whole. Communication of benefits to all employees is done through the budgetary system. If they achieve their targets, they are praised and remunerated accordingly. | (III) We have monthly management meetings where we discuss benefits from the relationships we have with our suppliers |
| (ii) personnel in other departments, and | As above. | | |
| (iii) your key suppliers? | We do not communicate these benefits to our suppliers. | (v) We continually meet with our CMT suppliers on a monthly basis and communicate to them the benefits arising from our relationship. | (Iv) We have monthly meetings with our suppliers. |

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| Demand Side Cost Management Issues | | | |
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| 23 How do your company and particularly the Production function use strategic cost management with key customers? Is there a model that is always used in all circumstances? | MAN 1 – 23<br><br>We engage our customer in cost management in terms of quality, time, price and styling.<br><br>(i) As far as fabric sourcing is concemed, we only use our customer-approved suppliers. This enables us to buy fabric that has been tested by our customer in their laboratories (sometimes quality testing is outsourced) and as a result we are in a position to produce good quality garments.<br><br>(ii) We work with our customer to design garment styles that are not only cost effective but also appealing to the end-use customers.<br><br>(iii) We also have agreed schedules that specify when we put garments in the factory and when the garments are expected in the customer's stores. This way we avoid delays in product delivery, which in tum reduces or eliminates stock-out costs in our customer's stores. We also avoid the extra costs of air freighting garments to our customer's stores in the event of delivery delays caused by us.<br><br>(iv) Target costing also helps us to manage costs of garments before we have eve started making them. Our customer gives us their selling price and we have to make sure that the garment cost is within the range that will enable us to make a profit. | MAN 2 – 23<br><br>(i) From our customers' point of view, they operate on the basis of pallets. If something is going to be delivered late, it's not going to fit in with that pallet and as such is not going to sell. If it doesn't sell, clearly, we then lose money. Therefore, on time delivery is very important in terms of ensuring that the colour of the pallet and the story in the stores are integrated and work well from a sales and appearance perspective within the retail store.<br><br>(ii) From a quality point of view, we have a strong quality focus due to the requirements of our customer. We therefore reduce quality-related problems at the customer's side, which means lower returns to us.<br><br>(iii) Good quality merchandise ensures high sales volume. Therefore from a cost management point of view, economies of scale can be achieved. Economies of scale mean power product cost. | MAN 3 – 23<br><br>We also do not interact much with the customer. Our sales and marketing, product development and our product technologists do that. |

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| | If we can't meet the customer's selling price and still be able to make a profit, we can re-engineer the garment. This entails changing certain style attributes without compromising the garment look and quality. If after we have re-engineered the garment, we still can't make a profit, then we tell our customer that we cannot make the garment. | | |
| 24 Do your key customers use a strategic cost management approach? Do you encourage your key customers to use strategic cost management? If so, how? | MAN 1 – 24<br>Yes, our influence is limited. We try to tell our customer that they should understand our cost structure and the problems that we face. However, due to the competitive nature of the industry, we can only do so much. | MAN 2 – 24<br>Yes, as discussed above. | MAN 3 – 24<br>N/A |
| 25 (a) What are the benefits that accrue to:<br>(i) your company, and | MAN 1 – 25<br>(i) Lower cost of production, hence high profitability.<br><br>(ii) Growth of our company due to increased demand from our customer.<br><br>(iii) The creation of trust due to good quality garments that are delivered on time. | MAN 2 – 25<br>(i) Lower cost of production through economies of scale.<br><br>(ii) More business from our customer. | MAN 4 – 25<br>N/A |
| (ii) your key customers, from the use of strategic cost management with key customers? | (iv) Creating value for the end-use customer which leads to high profitability for our customer.<br><br>(v) Security (reliable supplier) and trust development due to the delivery of good quality garments on time.<br><br>(vi) Growth for our customer due to the creation of value for the end-use customer. | (iii) High profitability for our customer. | |
| (b) How are these benefits measured and communicated to:<br>(i) personnel in the Production department, | (vii) Benefits are communicated via the | (iv) Benefits are communicated through | |

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| (ii) personnel in other departments &<br><br>(iii) your key customers? | Executive Team and workshops.<br><br>As above.<br><br>(viii) Benefits are not communicated to the customer. | regular weekly meetings with garment buyers and merchandise planners, where there is a free flow of communication between them and us.<br><br>As above. | |
| **Strategic Cost Management Tools** | | | |
| 26 Does your company have a set of tools used for strategic cost management? If so:<br>(i) What are they?<br>(ii) How are they used? | MAN 1 – 26<br><br>Yes we have some tools that we use.<br><br>(i) RTM Analysis<br>We analyse what are known as returns to manufacturer (RTMs) to give us insights into the reasons for such returns. These are garments returned to us by the retailer for various reasons, one such being quality problems.<br><br>RTMs are analysed per month and charts are produced to shown the sources of these returns as well as trends that help us to identify the way to rectify the problems.<br><br>Reasons for RTMs can be:<br>(a) trim faults<br>(b) fabric faults<br>(c) machine faults, i.e. the garments were not sewn properly.<br><br>RTMs are also classified as 'justified' or 'unjustified'. Unjustified RTMs are caused by end-use customer abuse in stores, e.g. pulling buttons. Justified RTMs are returns due to the manufacturer's fault.<br><br>The information generated fro the RTMs analysis helps us to rectify quality problems that affect the demand side of our business.<br><br>(ii) Target Costing | MAN 2 – 26<br><br>(i) Budgets are used to make sure that we don't unnecessarily go above the set targets. The finance department produces figures that show where we are going with our costs by way of monthly cost reports. We are then encouraged to reduce costs wherever we can.<br><br>(ii) We use cost target as a benchmark and then re-engineer garments that do not meet the target market price. We discuss a garment a style cost with the garment buyer and our CMT supplier with a view to re-engineering it to meet the target market price as well as the appearance of the garment. The process of re-engineering is achieved as follows:<br><br>Certain changes are made to the garment in such a way that the buyer is happy with both the price and appearance. It is a compromise situation, hence we have to work on the re-engineering process in such a way that we can achieve both.<br><br>Re-engineering is aimed at the production of a garment that the customer will buy. Thus we take into account our customer's selling price and desired margin. Re-engineering involves:<br>(a) changing the production process from a complex to a simpler process in order to | MAN 3 – 26<br><br>(i) All factory managers receive monthly management reports from Finance that show the cost of ingredients, packaging and labour as a percentage of their turnover on a weekly basis. The variances shown in the management reports allow factory managers to see what is driving up the total cost of products.<br><br>(ii) The tool that we use to reduce labour cost is the flexible working arrangement with staff. They work for a fixed 40 hour week, and still have a further 5 hours per week flexible at the normal time before going into overtime. If the workload is a bit less on a day, for instance, our staff needs only to work for an eight hour day. If the work is more on a given day, we have another hour before overtime kicks in. We can reduce labour costs by utilising the flexible working times.<br><br>(iii) We also plan in advance how many staff numbers we need in a given period. Where we need less, we can send some of our staff on leave (this is because we never shut down, we work for 52 weeks in a year). Thus scheduling staff is very important in cost management.<br><br>(a) We utilise short term contracts for peak periods. |

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| | Target costing enables us to analyse whether we can make a profit on a given garment. Our garment cost has to be within a range that allows us to meet our customer's selling price and give us a profit. Sometimes we accept a very small margin if we would achieve two things:<br><br>(a) high volumes<br>(b) develop a better relationship with our customer.<br><br>(iii) Variance reports<br>Variance reports are prepared by the Finance department by comparing the standard time with actual time. Cost savings are shown per:<br>(a) operation<br>(b) operator<br>(c) garment style<br>(d) production line<br><br>These reports help us to see where we are losing money. For example, if a machinist takes more time that budgeted per operation, it means we are losing money. We then investigate the reasons for the losses.<br><br>Where we have time savings, which result in cost savings, we then use the actual time to set future standards. This enables us to achieve continuous improvement. | reduce costs<br>(b) changing certain of the garment's make up without compromising the garment quality.<br><br>(iii) From a quality point of view, there is always a cost in achieving it, bearing in mind the definition of quality. The definition of quality is not that it's the best possible garment that once can make. Quality is based on what is acceptable to the customer. So we have to understand what the definition of quality by the customers is and then pitch up our manufacturing strategy accordingly.<br><br>In order to create awareness on quality within CMTs, we have a continual presence of quality auditors or CMT co-ordinators. Our manufacturers understand our quality requirements and we do not release any merchandise until it has been checked and signed for by the quality auditor.<br><br>(iv) Efficiency of process in the CMTs is another focus area of our cost management approach. Here we focus on personal efficiency in terms of how people should deal with processes that they have to deal with. We believe that there is always room for improvement in terms of how one deals with a process. We are constantly searching for ways of improving our efficiency and hence reduce our costs. For example, our operations have grown by 62% in the last two years but our headcount has grown by about 12%. This clearly shows a major improvement in our efficiency. | (b) We shift staff from one factory to another as a way of dealing with staff excess in one factory and staff shortage in another. Thus using the cost of production and planning reports generated by the finance department, we are able to plan ahead to avoid and minimise costs.<br><br>(iv) Our factories are laid out in such a way that similar products are produced in the same factory. Thus we manage the product mix in each factory closely. This facilitates planning and speeds up processes, which ultimately reduce costs.<br><br>(v) Also, we manage the product volumes in each factory to make sure that there is no congestion. Keeping the product volumes dealt with in each factory at medium size in order to simplify our production processes. We are in a position to increase our employee productivity which means a lower cost per unit of product.<br><br>(vi) Quality management throughout the production process is key in our cost management. We make sure that strict quality standards are adhered to right from the point we purchase our inputs from our suppliers, throughout the process of handling the inputs, processing them for production, during the production process, the packing process and delivery to our customer. Our focus therefore is on making sure that we avoid poor quality products from our production process.<br><br>Prevention of poor quality products is also achieved through avoiding product contamination and the |

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| | | | use of expired inputs. This objective is achieved in four ways.<br><br>**(a) Product testing**<br>Our products are tested daily and weekly for bacterial contamination. This is done in our laboratory.<br><br>**(a) Factory configuration**<br>Our factories are configured in such as way that we eliminate product contamination. The processing of ingredients such as vegetables is done in sections, namely the dirty and clean sections.<br><br>**'Dirty' section**<br>This section is generally regarded as low risk and is dedicated to cleaning vegetables such as carrots. One the vegetables are clean, they then enter the clean section. Employees working in this section have a particular colour of uniform that they wear to distinguish them from those working in the clean section.<br><br>**'Clean' section**<br>In this section, all clean vegetable are prepared for cooking. As such it is regarded as a high risk area. All employees in this section wear white uniforms and gumshoes. Each time an employee prepares to enter the high risk area by cleaning his/her hands with soap.<br><br>**(c) Cleaning of the factories**<br>The cleaning of the factories is done on daily basis by a third party. Factories are cleaning after hours and before they are used the following day, tests are conducted by the laboratory personnel to make sure that there are no contaminants.<br><br>**(d) The Management of inputs and products** |

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| | | | Ingredients are date coded to make sure that they do not go bad before they are used. Thus first-in-first out stock management approach is used.<br><br>Products such as salads and prepared vegetables are colour coded depending on when they were produced to also make sure that they do not go bad before they are used.<br><br>All these steps are taken to ensure that we produce products that are of high quality and hence acceptable to the end-use customer. |
| 27 Are personnel in the Production function trained to use the strategic cost management tools? | MAN 1 – 27<br><br>Yes they are. We have in-house training and sometimes we outsource the service. | MAN 2 – 27<br><br>We empower people to enable them to do their jobs properly, with clearly laid down responsibility and proper tools. | MAN 3 – 27<br><br>Our personnel are trained to maintain high quality products standards. |
| **General Strategic Cost Management Issues** | | | |
| 28 Has your company's emphasis on strategic cost management increased/decreased or stayed the same in the last two years? Why? | MAN 1 – 28<br><br>Our company's emphasis of strategic cost management has increased due to the need to maintain a competitive edge, i.e. producing efficiently and cost effectively. | MAN 2 – 28<br><br>It has increased immensely due to competition. | MAN 3 – 28<br><br>Definitely increased due to competitive pressure in the market, and that is why we are brining in a Cost Accountant to help us with cost management. |
| 29 Do you think supply chain management is viewed as of strategic importance in your company? | MAN 1 – 29<br><br>(i) Yes, supply chain management is viewed as of strategic importance in terms of lead times. This helps in cost management throughout the supply chain. We work closely with our customer and suppliers, i.e. we only use our customer-approved suppliers to ensure quality goods.<br><br>(ii) However, the relationship with supplier has to be mutually beneficial, i.e. there should be a win-win situation where the supplier, our company and our customer all benefit. | MAN 2 – 29<br><br>Absolutely. This is because the supply chain is basically the heart of the business. If you haven't got the supply chain right, you haven't got business. | MAN 3 – 29<br><br>(i) Very much so because up to 80% of the cost of product comes from supplier goods coming into the business. We are not a very high margin business, and given the fact that the cost of ingredients and packaging forms up to 80% of the cost of our products, we have to work seriously with the supply base on cost management. Otherwise our product will become more and more expensive and we will not be able to meet the target selling price and hence lose business.<br><br>(ii) For example in December 2002, when the price of poultry went from R23/kg to R29/kg, |

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| | | | we decided to import from Brazil at R19/kg (including transport and duty). |
| 30 Do you think the way supply chain management is viewed in your company has an impact on the success of cost management efforts? | MAN 1 – 30<br>Yes. It is good to develop a relationship with suppliers and customers with regard to lead times and quality, which have a positive impact on cost reduction. However, it is also important to develop a relationship because it deals with non-cost issues such as the removal of tension, hence the creation of a good working environment with suppliers and customers. | MAN 2 – 30<br>Most definitely. We could find cheaper suppliers but they would not be as efficient in terms of delivery and quality. There is no question that we could put cheaper merchandise in our stores but we would be destroying our business because we would not get the reliability and quality we are getting now. | MAN 3 – 30<br>Definitely it has an impact, although we still feel that more needs to be done. We think that with the coming in of a Cost Accountant, we will be able to see where exactly costs are coming from and then focus on such areas. |
| 31 Are there any other issues regarding strategic cost management (within your company, Production function, your key suppliers and customers) that you would like to talk about? | MAN 1 – 31<br>(I) The process of packing garments is an area for improvement. At the moment our customer requires us to package the garments individually and then package them per batch and this is costly.<br><br>(II) The dyeing process is also another are where costs could be reduced. | MAN 2 – 31<br>We realise that cost control and cost management is an integral part of any business' survival. We are now part of the global economy and we can't afford to be complacent, hence we have to be as competitive as possible. Therefore we always strive for it. | MAN 3 – 31<br>None. |

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# APPENDIX D

## DATABASE FOR MANUFACTURERS: SALES/MARKETING FUNCTION INTERVIEW RESULTS

| SALES & MKG DEPT. | Supply Chain 1 | Supply Chain 2 | Supply Chain 3 |
|---|---|---|---|
| **Company Name** | MANU 1 | MANU 2[1] | MANU 3 |
| **Job Title** | Sales & Marketing Executive | N/A | CEO |
| **Period with Company** | 4 | | N/A |
| **Period in Sales/Marketing** | 10 | | N/A |
| **General Issues** | | | |
| 1 Estimated sales in 2002 | MAN 1-1<br>Our sales in 2002 were about R200 million. | MAN 2 - 1<br>Transfers between the two sisters companies were said to be confidential, hence the researcher could not establish the value in Rand terms. However, MANU 2 supplies about 40% of its sister company garments needs. | MAN 3 - 1<br>In 2002 our sales were R55 million |
| 2 What are the keys competitive issues facing your company? | MAN 1 - 2<br>(i) Competition from importers and<br><br>(ii) The Rand exchange rate against the US dollar. We import some of our fabric and a fall in the Rand against the US dollar translates into higher import prices. This impacts negative on our ability to produce a garment that is priced competitively. | MAN 2 - 2<br>N/A | MAN 3 - 2<br>(i) We do not have an expensive set up in this department because we only have one customer who sells our products. We produce the customer's brand, not our own brand, hence most of the selling effort is done by our customer.<br><br>(ii) However, having said that, because of the close relationship we have with the customer, we are involved in their marketing strategy. We have to know what their marketing strategy is and we participate through for example, joint marketing strategy shows around the country.<br><br>The key issues with our customer as far as the goods we produce are concerned are:<br><br>(a) to get the goods to the stores on time |

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[1] MANU 2 does not have a Sales/Marketing function because it transfers its output to its sister companies in the RET 2 Group. It is the Design House within the group and its main function is the design and manufacture of garments that are transferred at cost and sold by its sister companies (retail outlets). Therefore questions 2 to 32 are not applicable.

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| | | | (b) understanding where the product brand is positioned in the marketing, especially concerning health issues<br><br>(c) quality of the products<br><br>(b) life style issues, i.e. the dual working life style of married couples or partners staying together. Such consumers need to be presented with improved products of high quality. Our marketing is mostly done by our in-store packaging that shows fresh, healthy and good quality products. The image portrayed is about a high life-style that gives consumers a choice between organic and non-organic foods. |
| 3 Have you re-engineered the Sales/Marketing function in the past year?<br>If so, why? | MAN 1 – 3<br><br>We have not changed the Sales function significantly as such. However, nowadays we do a garments showing (workshop) to the customer on a monthly basis due to the short lead times, i.e. each sales month has its own workshop. For instance, this is May, and we are doing the showing for December.<br><br>In the past we used to do the showing for the entire season for colour, styling and sizes right upfront. These days we do it closer to the time when the garment is required. This has been influenced by other suppliers getting their merchandise in our customer's store quicker to achieve a quicker turn-around time. | MAN 2 – 3<br><br>N/A | MAN 3 – 3<br><br>We do not have a sales and marketing department as such. This function is performed by our customer because we produce customer-branded products. |

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| 4 How is the Sales/Marketing function structured in terms of:<br><br>(i) Its organisation?<br><br>(ii) Reporting mechanism? | MAN 1 – 4<br><br>We have a Sales and Marketing Executive and then below there is a Merchandising Manager and then Merchandisers. The Merchandising Manager's responsibility is to coordinate the activities of the Merchandisers who serve different merchandise departments in our customer's stores. Having dedicated departments in our customer's stores enables Merchandisers to give special attention to the customer which results in a better service. | MAN 2 – 4<br><br>N/A | MAN 3 – 4<br><br>N/A |
| 5 (a) Does the Sales/Marketing function<br>have written, specific, quantifiable cost savings/cost management objectives?<br>If so, what are they?<br><br>(b) To who is the Sales/Marketing function accountable? | MAN 1 – 5<br><br>(I) We are required to make a decent bottom line, which is not easy. We have to make sure that our fabric and trim costs are not too high because our customer has specific profit margins that have to be met. It is our task therefore to make and deliver a garment that will meet the target selling price as required by our customer and still be able to make a profit.<br><br>(II) Also we are required to ensure that the production of the garment is in synch with the delivery times/dates as required by our customer. This means working closely with the customer's Buyers, our Design team and Production personnel to make sure that garments are delivered on time. | MAN 2 – 5<br><br>N/A | MAN 3 – 5<br><br>Since we do not do the marketing of our products, the cost of marketing is a fixed percentage based on our turnover. We pay our customer to do the marketing for us. We have a department that does research for new products – the product development department. They have a budget allocation that allows them to go overseas and do research on food trends and come back and develop a product for our local market. |
| 6 How is the performance of the Sales/Marketing function evaluated? | MAN 1 – 6<br><br>We are not really evaluated on specifics as such. We are however going to introduce an evaluation system that will track our | MAN 2 – 6<br><br>N/A | MAN 3 – 6<br><br>N/A |

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| | performance on certain measures on a monthly basis. Obviously if one is not pulling their weight, they get a warning. | | |
| **Cost Management Specific to the Sales/Marketing Function** | | | |
| 7 How important is cost management within the Sales/Marketing function? Why? | MAN 1 – 7<br><br>(I) Cost management is key; it is very important to us because our margins are not that very high. Probably (depending on the department), the highest margin that we can achieve is about 5%. Therefore it is important to make and deliver a garment that is priced competitively so that we can then benefit from high turnover.<br><br>(II) Also given competition from imports, it is very important for us to manage our costs so as to continue getting business from our customer. | MAN 2 – 7<br><br>N/A | MAN 3 – 7<br><br>N/A |
| 8 Where do you focus your cost management efforts within the Sales/Marketing function? | MAN 1 – 8<br><br>We focus on<br>(I) styling (the make up, i.e. how much detail is on the garment),<br><br>(II) the cost of the fabric and trims that we use and the,<br><br>(III) the processes required to make the garment (for instance does the garment need embroidery), and<br><br>(Iv) the cost of threads.<br><br>Our aim is to ensure that the garment style, fabric and trims are not unnecessarily expensive relative to the target market. The process of manufacturing the garment should not be too complex either. | MAN 2 – 8<br><br>N/A | MAN 3 – 8<br><br>N/A |

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| 9 Describe your overall cost management approach within the Sales/Marketing function for: | MAN 1 – 9 | MAN 2 – 9 | MAN 3 – 9 |
|---|---|---|---|
| | | N/A | N/A |
| (i) New products | (I) Our cost management is based on the target price as set by our customer. We try to ensure that our garment cost is within the parameters determined by the customer's target selling price and desired margin. | | |
| (ii) Existing products | When we cost a garment and our customer feels that it is too expensive, we have to go back to the drawing board, i.e. we have to re-design the garment.<br><br>(II) We look at cheaper ways of making the garment, i.e. cheaper alternative processes that yield the same result by substituting a given operation (more complex) with a simpler operation. By using a simpler operation instead of a complex one, we achieve cost savings.<br><br>(III) We also look at the make up of the garment to find certain features of the garment that we can change or eliminate without sacrificing quality. We thus try to simplify certain garment features so as to reduce costs.<br><br>(Iv) Other areas where we achieve cost reduction are the cost of the fabric and trims, i.e. we try to find cheaper fabric and trims. We try to match the quality of the fabric and trims with the garment's desired target market (the look of the garment) to make sure that we do not create a very expensive garment that will not meet the customer's desired | | |

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| | selling price. | | |
| 10 What is the Sales/Marketing function's responsibility for cost of serving key customers? | MAN 1 – 10<br>Our responsibility is to make sure that delivery dates and times are met as specified in the customer's delivery instruction. | MAN 2 – 10<br>N/A | MAN 3 – 10<br>N/A |
| 11 Are personnel in the Sales/Marketing function held individually responsible for cost variances of serving key customers? | MAN 1 – 11<br>No. | MAN 2 – 11<br>N/A | MAN 3 – 11<br>N/A |
| 12 Are the cost variances for serving key customers tied-in to the reward system within your company? | MAN 1 – 12<br>N/A | MAN 2 – 12<br>N/A | MAN 3 – 12<br>N/A |
| 13 What are the cost variances of serving key customers compared to? | MAN 1 – 13<br>N/A | MAN 2 – 13<br>N/A | MAN 3 – 13<br>N/A |
| 14 What is the role of the Sales/Marketing function in the:<br><br>(i) Development of an understanding of key customer needs?<br><br>(ii) Development of an understanding of customer value proposition within your company? | MAN 1 – 14<br>We liaise with the Planning and Production personnel to pass on the customer's specifications on a garment. We make sure that:<br><br>(I) the production personnel understand the quality requirements of the customer in terms of styling and make up,<br><br>(II) the purchasing department understands the fabric, trim and colour requirements and<br><br>(III) that the planning department is aware of the garment delivery dates and times. | MAN 2 – 14<br>N/A | MAN 3 – 14 |
| 15 What key cost drivers does the Sales/Marketing function manage within your company? | MAN 1 – 15<br>We manage the cost of garment samples. We are responsible for garment samples that we send to our customer for approval. | MAN 2 – 15<br>N/A | MAN 3 – 15<br>N/A |

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| Structure of Cost Management Efforts within the Sales/Marketing Function | | | |
|---|---|---|---|
| 16 Who drives the cost management practices within the Sales/Marketing function? Please explain the nature of their responsibility | MAN 1 – 16<br>We work as a team in the department. | MAN 2 – 16<br>N/A | MAN 3 – 16<br>N/A |
| 17 How is the Sales/Marketing function integrated into your company's overall cost management efforts? | MAN 1 – 17<br>We work closely with the Garment Designers, Planners and Production personnel to make sure that we produce garments that meet the customer's specifications on time. | MAN 2 – 17<br>N/A | MAN 3 – 17<br>N/A |
| 18 How is the Sales/Marketing function held accountable for cost management? | MAN 1 – 18<br>We are held accountable as far as the delivery of the right garment to our customer on time is concerned. | MAN 2 – 18<br>N/A | MAN 3 – 18<br>N/A |
| 19 Do you believe your company takes a total supply chain perspective to cost management? If you believe so, please explain how. If not, please explain why not. | MAN 1 – 19<br>Yes we need to be aware of the market, what competitors are doing and what prices they are setting in order that we do not price ourselves out of the market. We also want to make sure that we deliver good quality products on time. On time delivery is important because late deliveries mean you are not going to make a sale, which means no money and therefore no business. | MAN 2 – 19<br>N/A | MAN 3 – 19<br>N/A |
| 20 Do you benchmark cost management practices in the Sales/Marketing function against other companies in the industry? | MAN 1 – 20<br>Yes, we look at what our competitors are doing in terms of on-time delivery. | MAN 2 – 20<br>N/A | MAN 3 – 20<br>N/A |
| **Demand Side Cost Management Issues** | | | |
| 21 How does your company and particularly the Sales/Marketing function use strategic cost management with key customers? Is there a model that is always used in all selling circumstances? | MAN 1 – 21<br>(i) In order to get the right garments at the right price, time and place, we adhere to agreed delivery dates. We work with our customer along a critical path.<br><br>This path tell us<br>• when we need to be sourcing fabric and trims,<br>• when we need to be booking the garment for production, | MAN 2 – 21<br>N/A | MAN 3 – 21<br>N/A |

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| | • when we need to be fitting,<br>• when we need to be approving,<br>• when we need to be shipping,<br>• when we need to be producing the garment, and<br>• when we need to be dispatching the finished garment in order to meet the sales of a given month. Our customer and us follow this critical path to ensure that the timing is right, so that the lead times are not rushed, and quality maintained all the time.<br><br>(ll) We have strategy meetings every six months, followed by weekly production meetings with our customer. These meetings involve all the departments where we focus on<br>(a) newness (latest garment styles),<br><br>(b) current garments that are booked and where we are in terms of production and delivery,<br><br>(c) whether the fabric is working on the style,<br><br>(d) whether the cost-price ratio is right, and<br><br>(e) whether we are agreeing on cost of the garment.<br><br>The people that we deal with on the customer side are the Buyers, Planners, Merchandise Controllers, Fabric and Garment Technologists.<br><br>(lli) Where there are cut-backs due to poor sales in the customer's stores, we are informed on time so that we can adjust our fabric and trim | | |

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| | ordering, production and delivery of garments. This helps us to deal with the development of excess inventory along the supply chain. Where cut-backs occur after we have already produced the garments, we hold the stock in our dispatch department, and we charge the customer for holdings costs. The customer will eventually be made to pay for the garments remaining at the end of the season.<br><br>(Iv) Also our communication with our customer is cost effective. We use EDI, which allows our customer to give us delivery instructions as to when we should dispatch garments. The system is linked to our customer's main system that generates pre-production requirements (the nature of the garments, the fabric and trims required), and the contract between us the customer. Each delivery from us is communicated to RET 1 through EDI, which in turn communicates to the main system to confirm that the required garments (as per the main system) have been delivered. | | |
| 22 Do your key customers use a strategic cost management approach? Do you encourage your key customers to use strategic cost management? If so, how? | MAN 1 – 22<br><br>Yes our key (and only) customer uses a strategic cost management approach. | MAN 2 – 22<br><br>N/A | MAN 3 – 22<br><br>N/A |
| 23 (a) What are the benefits that accrue to:<br>(i) your company, and | MAN 1 – 23<br><br>(I) We agree that we receive X amount of units per year in form of orders from our customer. This benefits us from a | MAN 2 – 23<br><br>N/A | MAN 3 – 23<br><br>N/A |

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| | planning point of view. We also get high order volumes that keep our production lines running for longer periods. The longer the production run is, the lower the cost per garment. | | |
| (ii) your key customers, from the use of strategic cost management with key customers? | (II) They get a more reliable supply of high quality garments at competitive prices. As I said earlier, longer production runs result in lower unit cost, which in turn means a better price for our customer. | | |
| (b) How are these benefits measured and communicated to:<br>(i) personnel in the Sales/Marketing department,<br>(ii) personnel in other departments & | (III) We communicate within our company through Executive meetings. | | |
| (iii) your key customers? | (Iv) We also make it clear to RET 1 in our strategy and weekly meetings that we prefer long production runs because they allow us to achieve economies of scale. | | |
| 24 (a) How are the benefits from cost management shared with key customers?<br><br>(b) To what extent do you feel this sharing (of benefits) is equitable? | MAN 1 – 24<br>The sharing is done through agreeing on the margins that we both get (i.e. our company and our customer) from the garments. | MAN 2 – 24<br>N/A | MAN 3 – 24<br>N/A |
| 25 Do your key customers use strategic cost management efforts in managing costs of doing business with your company? | MAN 1 – 25<br>(I) Yes, through agreements that require us to work overtime if we are late in meeting the delivery date as specified by the customer. If we are very late, then we have to do direct store delivery, which obviously requires us to air-freight the garments to make sure that we meet the delivery date and | MAN 2 – 25<br>N/A | MAN 3 – 25<br>N/A |

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| | time. The costs of working overtime and air-freighting garments are borne by us, and not the customer. This way the customer reduces stock-out costs.<br><br>(ii) Sometimes our customer can accept late deliveries on the sales-return basis. This way the customer sells as many garments as possible and at the end of the season, any garments unsold are return to us. We also pay for the cost of returning the garments. However, this does not happen often. Most of the time when we are late, we end up doing direct store delivery.<br><br>(iii) If the late delivery is not necessarily our fault, our customer fast-tracks the delivery of the garments straight into the stores to avoid lost sales.<br><br>(iv) We also communicate problems on a one-on-one basis, i.e. a Merchandiser speaks to the relevant garment department's Buyer. | | |
| 26 Do you conduct customer profitability analysis? | MAN 1 – 26<br>We do not really. We only serve one customer, hence we do not conduct customer profitability analysis. | MAN 2 – 26<br>N/A | MAN 3 – 26<br>N/A |
| 27 Do you work with key customers to manage your costs of doing business with them? If so, please explain how. | MAN 1 – 27<br>As explained in question 26 above. | MAN 2 – 27<br>N/A | MAN 3– 27<br>N/A |
| 28 Do you understand the cost drivers in your key customers' accounts? If so, please explain what they are. | MAN 1 – 28<br>Merchandise cost, late deliveries and poor quality. | MAN 2 – 28<br>N/A | MAN 3 – 28<br>N/A |

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| Strategic Cost Management Tools | | | |
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| 29 Does your company have a set of tools used for strategic cost management? If so:<br>(i) What are they?<br><br>(ii) How are they used? | MAN 1 – 29<br><br>(i) We use target costing as I explained earlier. The purpose of target costing to contain our cost before we manufacture garments.<br><br>(ii) We also benchmark our costs against competitors to ensure that we remain competitive. | MAN 2 – 29<br><br>N/A | MAN 3 – 29<br><br>N/A |
| 30 Are personnel in the Sales/Marketing function trained to use the strategic cost management tools? | MAN 1 – 30<br><br>We have in-house training. | MAN 2 – 30<br><br>N/A | MAN 3 – 30<br><br>N/A |
| **General Strategic Cost Management Issues** | | | |
| 31 Has your company's emphasis on strategic cost management increased/decreased or stayed the same in the last two years? Why? | MAN 1 – 31<br><br>Our focus on cost management has increased due to:<br><br>(i) competition and<br><br>(ii) high input costs. We are trying to focus more on the price of fabric and trims, especially those that are imported, in the wake of the fall in our currency against the US dollar over the past three years. | MAN 2 – 31<br><br>N/A | MAN 3 – 31<br><br>N/A |
| 32 Do you think supply chain management is viewed as of strategic importance in your company? | MAN 1 – 32<br><br>Yes, because our processes along the supply chain feed into each other. A reliable supplier enables us to be reliable to our customer as well, which obviously increases our business and bottom line. The more efficient we are in getting garments into the customer's stores, the large the volume that we can sell. Managing our processes from our suppliers, through our own company right up to the customer enables us to supply the right garment, at the right quality, price and place. | MAN 2 – 32<br><br>N/A | MAN 3 – 32<br><br>N/A |

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| 33 Do you think the way supply chain management is viewed in your company has an impact on the success of cost management efforts? | MAN 1 – 33<br>Yes; basically it's about the bottom line. We focus on our production processes, and also make sure that we get the best price for the fabric and trims that we source from our suppliers. A better price from our suppliers makes us competitive, which in turn makes them competitive (through high order volumes that we place with them) and that then makes our entire supply chain more competitive. | MAN 2 – 33<br>N/A | MAN 3 – 33<br>N/A |
| 34 Are there any other issues regarding strategic cost management (within your company, Sales/Marketing function, your key suppliers and customers) that you would like to talk about? | MAN 1 – 34<br>This industry is very difficult. Out of say ten sample garments that we produce a month, we mange to 'sell' the concept of maybe two of them to the customer. Yet the cost involved in coming up with the sample garments is huge. We as a supplier are not in a power position; we are at the short end of the stick. The customer dictates what we should do and as a 100% supplier, our customer knows that we have no choice but to meet their expectations. | MAN 2 – 34<br>N/A | MAN 3 – 34<br>N/A |

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## DATABASE FOR MANUFACTURERS: FINANCE FUNCTION INTERVIEW RESULTS

| FINANCE DEPT. | Supply Chain 1 | Supply Chain 2 | Supply Chain 3 |
|---|---|---|---|
| **Company Name** | MANU 1 | MANU 2 | MANU 3 |
| **Nature of Business** | Clothing | Clothing | Food |
| **Job Title** | **Finance Director** | **Senior Finance Manager** | **Finance Manager** |
| **Period with Company** | 11 years | 22 years | 6 years |
| **Period in Finance** | 15 years | 22 years | 6 years |
| **General Issues** | | | |
| 1 What are the keys competitive issues facing your company? | MAN 1- 1<br><br>(I) Striving to be a dependable supplier that supplies the right products, on time and at the right price.<br><br>(II) We are facing a lot of competition from other suppliers.<br><br>(III) Also the Rand exchange rate presents our company with a challenge because we import about 80% of our fabric. | MAN 2 – 1<br><br>(I) Price is a big thing in our industry. First of all, from a manufacturing point of view the price we pay for the manufacture of garments by our CMT suppliers goes through to the retail selling price. Your garments may be of the same quality as your competitor's but if your price is not competitive, then you lose business.<br><br>(II) Another competitive issue is that we are in a high fashion industry. If your product does not sit well with the consumer, then our competition will take business from us. | MAN 3 – 1<br><br>The management of the cost of:<br>(I) ingredients,<br><br>(II) labour as well as<br><br>(III) repairs and maintenance. |
| 2 Have you re-engineered the Finance function in the past year?<br>If so, why? | MAN 1 – 2<br><br>Not really. However, we have placed a lot of emphasis on managing the impact of exchange rate fluctuations. | MAN 2 – 2<br><br>We have not re-engineered the finance function because most of the resources of the company are dedicated to the retail division. Thus the manufacturing division has taken a back seat over the years.<br><br>However, the South African supply base has gone down over the years and the Group has realised that they need to rely on us more and more. Thus the supply of systems is now a priority in the manufacturing division, hence we will soon re-engineer our | MAN 3 – 2<br><br>Basically remained the same. We recently employed a Cost Accountant because I do not have the time to go over the financial state of affairs with the Production Managers. The Cost Accountant's focus is on the production side, looking at the cost of ingredients and packaging. Thus the Cost Accountant has to understand how production works so that he can be able to give a good service to the production managers. |

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| | | finance function within the division. | |
| 3 How is the Finance function structured in terms of:<br>(i) Its organisation? | MAN 1 – 3<br>The finance function is headed by the Finance Director and below him is Accounting Administration staff. The Administration staff is made up of two managers, one in charge of bookkeeping and a clerk each for creditors, debtors and cash, and another in charge of wages and salaries. | MAN 2 – 3<br>There is a financial manager at the top (i.e. myself), below me are two financial accountants, below them are financial controllers and below them are supervisors. One of the financial accountants is solely responsible for the manufacturing division and the other one is responsible for one of our retail outlets as well as the manufacturing division. All in all there are ten people in the finance function.<br><br>The function of this department is to put together budgets on an annual basis, to report any variances against those budgets, i.e. variances against sales and expenditure. We also pay our creditors – our fabric, trim and CMT suppliers. The CMTs are paid on a weekly basis but the fabric and trim suppliers are paid on a monthly basis. We also deal with the debtors' side of our business – our sister retail companies and other fabric shops that buy our reject fabrics, overruns and reject garments. | MAN 3 – 3<br>We have the Finance Manager, then the General Office Manager, the Cost Accountant and then creditors, debtors and payroll clerks who report to the General Office Manager. The Cost Accountant reports directly to the Finance Manager. |
| (ii) Reporting mechanism? | The clerks report to their respective managers, and the managers report to the Finance Director. The Finance Director reports to the Managing Director. | The financial accountants and controllers report to me. Reporting to the accountants are senior financial controllers and reporting to them are supervisors. | As above |
| 4 (a) Does the Finance function have written, specific, quantifiable cost savings/cost management objectives?<br>If so, what are they? | MAN 1 – 4<br>The finance function produces monthly variance reports that compare actual output | MAN 2 – 4<br>(I) We work as a team with production, designing, purchasing and logistics | MAN 3 – 4<br>(I) Not the finance function itself, we simply keep all the paperwork flowing. Our |

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| | against the budget. The reports are used by other departments in MANU 1, e.g. production, purchasing and logistics | departments from the beginning of the production process when the production department negotiates prices of garments.<br><br>(ii) We look at the impact of a garment's style on cost via the labour and material requirements. This enables our company to negotiate the best price of making a garment with our CMTs because the price has a knock-on effect on the retail price. Every Rand that we incur in the manufacturing process could possibly mean a R2 to R3 impact on the retail price. Thus our focus is to be cost effective.<br><br>(iii) We also try to manage our finance function (which is a cost centre) to make sure that our expenditure in the department is kept to a minimal. This is done through budgets. | business is divided into different factories that are regarded as cost centres and the function of finance is to make sure that costs are allocated properly to the right factory.<br><br>(ii) Also the finance function ensures that the monthly figures have all been done accurately so that the management report that comes out of the figures is accurate. If the management report is not accurate, then we do not have anything to go on. Our task is to produce meaningful information in form of variance reports for each factory. The reports highlight where we are not performing well, e.g. waste and inefficiency levels in the factories. Factory managers use the reports to focus cost reduction in the problem areas. |
| (b) To who is the Finance function accountable? | The finance function is accountable to the Managing Director. | The finance function is accountable to the Managing director of the company. | The finance department is accountable to the Managing Director. |
| 5 How is the performance of the Finance function evaluated? | MAN 1 – 5<br><br>Timely preparation of monthly management reports. | MAN 2 – 5<br><br>(i) How we produce the monthly reports, i.e. how effectively we produce the scorecards of the business.<br><br>(ii) We are also evaluated on the basis of cost savings against the budget.<br><br>(iii) Decisions that we make on capital investment that is meant to benefit our company from a cost savings point of view are also taken into account.<br><br>(iv) Our ability to put our fingers on the pulse of all the departments, including the projections that the departments make to ensure that the | MAN 3 – 5<br><br>Based on deadlines on which reports and any other information from the finance department should have been produced. The CEO of the company does the evaluation. |

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| | | projections are accurate is one important measure of our performance. | |
| **Cost Management Specific to the Finance Function** | | | |
| 6 How important is cost management within the Finance function? Why? | MAN 1 – 6<br><br>Cost management is very important because we want to see where the money is going and reasons thereof. | MAN 2 – 6<br><br>Cost management is important in terms of running the business. Our ability to reduce costs impacts on our competitiveness. | MAN 3 – 6<br><br>Cost management is very important in this company. If we are not competitive, we go out of business. |
| 7 Where do you focus your cost management efforts within the Finance function? | MAN 1 – 7<br><br>We focus on variance analysis, i.e. showing through the monthly management reports where the company is losing money. | MAN 2 – 7<br><br>(I) We focus on the structure of the finance function to make sure that it is efficient.<br><br>(II) We also focus on input costs – trims, fabric and labour - through participation in the price negotiation process with suppliers.<br><br>(III) We also emphasise cost-effective capital investment decisions. Our task is to make capital investment decisions that result in cost savings. | MAN 3 – 7<br><br>(I) The cost of running the finance function is fixed (fixed number of people) and in real terms it is in fact declining due the expansion of the company.<br><br>(II) Our main focus is therefore on the provision of an efficient service to the factories producing timely and meaningful monthly reports. |
| 8 Describe your overall cost management approach within the Finance function: | MAN 1 – 8<br><br>The finance function is not involved in cost management for new and existing products. | MAN 2 – 8<br><br>We focus on economies of scale and the learning curve effect.<br><br>**(I) Economies of scale**<br>An important area in the cost of garments relates to volume. What is costly to the CMT manufacturer is to have numerous lines of different products. The greater the volume of the same products they deal with, the lower the cost due to the economies of scale.<br><br>**(II) Learning curve**<br>The learning curve effect is also important because labour cost goes down as more units of the same garment are made by the CMT suppliers. This is advantageous to the CMT manufacturer | MAN 3 – 8<br><br>(I) The finance department does not have a direct involvement in cost management of new and existing products. We have a separate function (Costing Centre) that does the costing of our products. They do that in conjunction with the Product Development team.<br><br>(II) The product development team and the costing centre firstly handle new products coming in. The product then goes into the factory. |

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| | | as well as to our company in terms of cost savings. However, the types of merchandise (called the core merchandise) from which we are able to take advantage of economies of scale and the leaning curve effect are limited (for example jeans). | |
| 9 What is the Finance function's responsibility for cost of products produced? | MAN 1 – 9<br>None | MAN 2 – 9<br>None. | MAN 3 – 9<br>None |
| 10 Are personnel in the Finance function held individually responsible for cost variances of products produced? | MAN 1 – 10<br>No | MAN 2 – 10<br>No. | MAN 3 – 10<br>No. |
| 11 Are the cost variances for products produced tied-in to the reward system within your company? | MAN 1 – 11<br>Variances are not part of the reward system. | MAN 2 – 11<br>No. | MAN 3 – 11<br>N/A |
| 12 What are the cost variances of products produced compared to? | MAN 1 – 12<br>Current budgets and previous year's variances. | MAN 2 – 12<br>(I) We produce variances on turnover and expenditure against budget.<br><br>(II) We also do variance analysis for actual cost of garments against the projected cost – a process that we call **back costing**. These are variances that arise due to either efficiencies or inefficiencies in the production process of our garments, or inaccurate input projections at the pre-production stage.<br><br>The variances will then help us to adjust our prices of garments, either downwards (where there are cost savings due less input cost) or upwards (where we had under costed the garments at the pre-production stage). | MAN 3 – 12<br>N/A |

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| 13 What is the role of the Finance function in the:<br>(i) Development of an understanding of key customer needs? | MAN 1 – 13<br><br>The development of an understanding of key customer needs is done at the sales level. All we do is to work on a budget that utilises the factory capacity and then the sales personnel look for business that maximises the usage of that capacity. | MAN 2 – 13<br><br>Everyone in the business understands key customer needs, i.e. fashionable garments at a good price, and excellent quality delivered in time. How this impacts on finance in terms of:<br><br>(I) The accuracy of product costing and feeding this information back to the people at the front end of the business.<br><br>(II) Also we ensure that all the administration between our production division and the other divisions is done on time and accurately. | MAN 3 – 13<br><br>The finance function does not have a role in the development of the understanding of customer needs. We simply perform the administrative function of creditors, debtors, payroll and monthly management accounts. |
| (ii) Development of an understanding of customer value proposition within your company? | Limited to what is discussed in (i) above. | As above. | As above |
| 14 What key cost drivers does the Finance function manage within your company? | MAN 1 – 14<br>(I) Input costs (ingredients and packaging) and<br><br>(II) labour costs. | MAN 2 – 14<br>(I) Input costs (fabric, trim, labour) and<br><br>(II) staff costs. | MAN 3 – 14<br>The cost of<br>(I) ingredients and<br><br>(II) labour |
| **Structure of Cost Management Efforts within the Finance Function** | | | |
| 15 Who drives cost management within the Finance function? Please explain the nature of their responsibility | MAN 1 – 15<br><br>The Finance Director drives cost management within the finance function. This is achieved through meetings on weekly basis. Emphasis is given to:<br><br>(I) the variances coming from the production department and<br><br>(II) the management of the exchange rate (forward cover). | MAN 2 – 15<br><br>The Senior Finance Manager with the involvement of all finance personnel. | MAN 3 – 15<br><br>The Finance manager with his team. |
| 16 How is the Finance function integrated into your company's overall cost management efforts? | MAN 1 – 16<br><br>(I) The finance function is part of an Executive Team made up of Sales, Design, Production, Stores, Fabric | MAN 2 – 16<br><br>(I) We work with other departments such as production, purchasing, logistics and quality control. | MAN 3 – 16<br><br>(I) The finance function interacts with purchasing and sales departments, although everything is very much computer-driven |

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| | Purchasing, Finance departments, and the Managing Director.<br><br>(ii) The Executive Team meets regularly and makes recommendations that are then fed into the respective departments by the respective executive members.<br><br>(iii) All the other departments through formal means (as part of the Executive Team meetings) and informal means – during lunch, in corridors etc. | (ii) We meet regularly to discuss where we are doing well and where things are not going on well. | because of having one customer. For instance sales are generated from the customer's point of sales systems in the stores.<br><br>(ii) From the buying point of view, the interaction with finance is in terms of ensuring that Buyers have all the correct paperwork on time, coded correctly so that it will fall into the right accounts |
| 17 How is the Finance function held accountable for cost management? | MAN 1 – 17<br><br>The finance function is held responsible for monitoring what is going on in other departments. Its monitoring function is largely through the production of timely monthly management reports. | MAN 2 – 17<br><br>(i) Our function is to produce timely monthly management reports that show both good and poor performance.<br><br>(ii) We also get involved in the price negotiation process with key input suppliers. | MAN 3 – 17<br><br>The Finance function is not held accountable for cost management. Our role is simply to produce monthly reports that highlight areas where cost reduction can be achieved. |
| 18 Do you believe your company takes a total supply chain perspective to cost management? If you believe so, please explain how. If not, please explain why not | MAN 1 – 18<br><br>Yes. The company looks at the input, manufacturing and selling costs. | MAN 2 – 18<br><br>We focus on the entire supply chain as far as possible, although I think that there is room for improvement. When times are hard, we focus more on cost savings across the supply chain, but when times are good, that focus is not emphasised. | MAN 3 – 18<br><br>(i) We do to a degree because it is not the normal business supply chain because we deal with only one customer. That customer has a very strong supply chain that we tape into. So we do not have to do marketing or phone around to get orders to generate sales. It is driven from the other point (customer's side).<br><br>(ii) The customer's stores give us the point of sale information, which then generates orders, which we then produce for, we deliver and that same order accompanies the delivery note and the invoice at the end of the day. So we probably have a comfortable ride in that we don't have to have a full supply chain system, although the customer charges us for |

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| | | | this service. |
| 19 Do you benchmark cost management practices in the Finance function against other companies in the industry? | MAN 1 – 19<br>(i) Not really. Within the group there is some benchmarking but to do the same with companies outside the group is difficult because their results are private.<br><br>(ii) To some extent benchmarking with outsiders happens informally via the customer who says 'if X supplier can produce the same garment cheaper, why can't you do the same?' We are thus forced to keep our costs as low as possible in order to remain competitive. | MAN 2 – 19<br>(i) In terms of input costs, we do this on a daily basis because when we supply our sister companies with garments, they compare our prices with outside suppliers that they deal with.<br><br>(ii) It is difficult to benchmark our running costs with other companies because there are some resources that we almost get for free because we are part of a large group. For instance, we have a warehouse where we accumulate all garments before we deliver them to the customer. We don't pay the rental for the warehouse; hence we do not have a true measurement of running the business. | MAN 3 – 19<br>No we do not. We cannot other companies' information that is required to do so. |
| **Supply Side Cost Management Issues** | | | |
| 20 How does your company, and particularly the Finance function use strategic cost management with key suppliers? | MAN 1 – 20<br>We do this through<br>(i) price negotiation, We can show our suppliers that their price is above their competitors and that encourages them to reduce their costs.<br><br>(ii) emphasis on quality and Good quality fabric results in a good quality garment and less rejects.<br><br>(iii) agreeing on delivery times. Delivery times are very important in that late deliveries result in losses due to idle time in the factories. Also it means we can't meet the customer's delivery time, which results in having to air-freight | MAN 2 – 20<br>We help our CMT suppliers financially when they want to re-capitalise their operations in order to improve their efficiency. This is for mutual benefit for us and the CMTs, i.e. we benefit from better product quality at lower price and they benefit from improved operations. Thus we give them a soft loan whose interest is lower than the interest charged by financial institutions. | MAN 3 – 20<br>We do not have interaction with key suppliers. That is the responsibility of our purchasing department. |

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| | garments to our customer's stores. | | |
| 21 Do your key suppliers use a strategic cost management approach? Do you encourage your key suppliers to use strategic cost management? If so, how? | MAN 1 – 21<br>Yes. We achieve this through negotiation. | MAN 2 – 21<br>We do not know. We hope they do. | MAN 3 – 21<br>N/A |
| 22 (a) What are the benefits that accrue to:<br>(i) your company, and | MAN 1 – 22<br>(i) Increased profitability due to the production of the right garment for the customer.<br>(ii) Also we get a better service and better value from the supplier. | MAN 2 – 22<br>(i) We get good quality garments from our CMT suppliers at competitive prices.<br>(ii) Improved bottom line as a result of more business from our customer due to lower costs. | MAN 3 – 22<br>N/A |
| (ii) your key suppliers, from the use of strategic cost management with key suppliers? | (iii) Improved bottom line and<br>(iv) the ability to provide a better service. | (iii) Our CMT suppliers are assured of supply of work, i.e. the manufacture of garments.<br>(iv) Improved bottom line.<br>(v) We also pay them as efficiently as possible - we pay them electronically, so they save time, which leads to cost reduction and improved bottom line. | |
| (b) How are these benefits measured and communicated to the rest of the company? | (v) The benefits are mostly measured through profit statements (Management Pack), gross profit per department, reject analysis and returns from the customer. These are communicated via the Executive Team meetings. | (vi) Benefits are communicated through financial statements as well as monthly management accounts. | |
| (ii) your key suppliers | (vi) Communication of benefits to the suppliers is not formal. However, we show recognition of the supplier's contribution to cost management. | (vii) We have regular contact through meetings. | |

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| Demand Side Cost Management Issues | | | |
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| 23 How does your company, and particularly the Finance function use strategic cost management with key customers? Is there a model that is always used in all circumstances? | MAN 1 – 23<br>(I) We work closely with our key customer to deal with cost issues. For example, we discuss the impact of the exchange rate fluctuations on our cost.<br><br>(II) We do not purchase fabric until our customer has agreed to the quality and price of the fabric, i.e. we only purchase fabric from our customer-approved suppliers.<br><br>(III) We also work on need-time schedules that specify what the customer needs and the time the garments are needed. This is done to make sure that we order the fabric on time (taking into account lead times of importing fabric from China), and then produce the garment on time to be in the customer's stores on time. | MAN 2 – 23<br>We work closely with our customers in areas such as:<br><br>(I) garment design<br><br>(II) production scheduling<br><br>(III) benchmarking garment costs against overseas companies. | MAN 3 – 23<br>We also do not have contact with the customer. This is the responsibility of our merchandisers in the sales and marketing department. |
| 24 Do your key customers use a strategic cost management approach? Do you encourage your key customers to use strategic cost management? If so, how? | MAN 1 – 24<br>Yes. We encourage our customer to use strategic cost management through price negotiation. | MAN 2 – 24<br>Yes they do. We work with them on a daily basis. | MAN 3 – 24<br>N/A |
| 25 (a) What are the benefits that accrue to:<br>(i) your company, and | MAN 1 – 25<br>(I) Cost reduction enables our customer to buy more garments from us. Our customer's budget is Rand-based. This means the more we reduce costs, the cheaper each garment becomes, and the more garments the customer buys from us.<br><br>(II) We are thus able to improve our profitability and maximise factory capacity utilisation. | MAN 2 – 25<br>We achieve costs savings and increased profitability as a group. | MAN 23 – 25<br>N/A |

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| (ii) your key customers, from the use of strategic cost management with key customers? | (iii) Our customer benefits from quality garments at good value, which the end-use customer is prepared to buy. This improves profitability of our customer. | As above. | |
| (b) How are these benefits measured and communicated in your company? | (iv) The benefits are mostly measured through profit statements (Management Pack), gross profit per department, reject analysis and returns from the customer. These are communicated via the Executive Team meetings. | We communicate through monthly management meetings and management reports. | |
| (iii) your key customers? | (v) Communication of benefits to the customer is not formal. However, we appreciate and show recognition of the customer's contribution to cost management. | As above. | |
| **Strategic Cost Management Tools** | | | |
| 26 Does your company have management accounting techniques used for strategic cost management? If so:<br>(i) What are they?<br>(ii) How are they used? | MAN 1 – 26<br><br>(i) Yes. Target costing, monthly management reports and budgets.<br><br>(ii) For target costing, look at the fabric cost, labour, overheads and selling costs and the possible selling price. We then determine the target cost. We try to reduce our garment costs so as to achieve the target cost.<br><br>(iii) Monthly management reports. These reports help us to see where we are not performing well. We then focus on such areas to improve efficiency as a way of reducing costs. | MAN 2 – 26<br><br>We use budgets as a tool that helps us to constrain our expenditure. Budgets are set for all the areas of the business and we try to ensure that our expenditure, for example, the running of this department, is in line with the budgeted amount. | MAN 3 – 26<br><br>We use the following tools:<br><br>(i) variance reports based on budgets.<br><br>(ii) Target costing<br>This approach is applied during the product development stage. We work closely with the product development team in our company. Our task is to ensure that a new product is financially viable before it is launched. |
| 27 Are personnel in the Finance function trained to use the strategic cost management tools? | MAN 1 – 27<br><br>Managers in the finance function are | MAN 2 – 27<br><br>Yes, we have in-house training programs. | MAN 3 – 27<br><br>Training will be done in future. |

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| | trained to use the tools. | | |
| **General Strategic Cost Management Issues** | | | |
| 28 Has your company's emphasis on strategic cost management increased/decreased or stayed the same in the last two years? Why? | MAN 1 – 28<br>The emphasis on strategic cost management has increased due to the following:<br>(I) There is pressure on the selling price. Inflation has gone up and there is need to be efficient.<br>(II) Also exchange rate problems – the fall of the Rand against major currencies – have made cost management more important. | MAN 2 – 28<br>Increased due to intense competition in the clothing sector. | MAN 3 – 28<br>It has increased because of the price pressures faced by our customer. |
| 29 Do you think supply chain management is viewed as of strategic importance in your company? | MAN 1 – 29<br>Yes. Tight constraints on deliveries have made supply chain management very important to our company. | MAN 2 – 29<br>It is, otherwise we would be out of business. | MAN 3 – 29<br>We do in order to be competitive. We take supply chain management seriously. This is seen in the way we are integrated with our customer. |
| 30 Do you think the way supply chain management is viewed in your company has an impact on the success of cost management efforts? | MAN 1 – 30<br>Yes. We are much more aware of the need to get garments to the customer on time, which in turn requires that our suppliers deliver inputs on time. | MAN 2 – 30<br>Yes, that is why we work closely with our CMT suppliers. | MAN 3– 30<br>Our company makes every effort to work with our ingredient suppliers and our customer to ensure that we reduce waste along the supply chain. |
| 31 Are there any other issues regarding strategic cost management (within your company, Finance function, your key suppliers and customers) that you would like to talk about? | MAN 1 – 31<br>None. | MAN 2 – 31<br>None | MAN 3 – 31<br>None |

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## DATABASE FOR SUPPLIER COMPANIES: INTERVIEW RESULTS

| SUPPLIERS | Supply chain 1 Supplier | Supply chain 2 Supplier | Supply chain 3 Supplier |
|---|---|---|---|
| **Company Name** | SUP 1 | SUP 2 | SUP 3 |
| **Job Title** | Branch Manager | Managing Director | Production Manager |
| **Period with Company** | 5 years | 13 years | 8 years |
| **Period in Position** | 2 years | 13 years | 8 years |
| **Company Background** | | | |
| 1 What is your company's estimated sales/turnover in 2002? | SUP 1-1<br>Our company's sales were between R101 million to R500 million | SUP 2 – 1<br>Our turnover was below R50 million in 2002. | SUP 3 – 1<br>Our company's turnover for 2002 was just less than R50 million |
| 2 What is the major business of your company? | SUP 1 – 2<br>We manufacture and sell fastening products such as zippers, hooks and loops. | SUP 2 – 2<br>We make garments – blouses and intimate wear. Our job is to provide labour for the retailers, i.e. we cut the fabric, make the garment, and put the trims on, hence we are referred to as cut-make-and-trim (CMT). Our customer is a Design House that sells a garment concept to its customers. We then make the garment, thus we are a "labour broker" in a way. | SUP 3 – 2<br>We have been operating in the beef industry for about 35 years. We buy and process beef into a number of beef products. Examples of our products are sausages, mince meat and steak such as shin. Our main customers are in the hospitality industry such as hotels and restaurants, and manufacturers of food items that require beef products, such as MANU 3. |
| 3 What key competitive issues are facing your company? | SUP 1 – 3<br>(i) Our key competitive issues are price and delivery.<br><br>(ii) We aim to charge prices that are competitive as well as being able to deliver good quality products. | SUP 2 – 3<br>(i) Our major competitive issues are due to imported garments from China. In 2005, the import quarter system is going to fall off. That means imports from China are going to flood our markets. They are able to make good quality products cheaply because the whole industry is fully integrated.<br><br>(ii) As an industry, we do not have a common national strategy of ensuring that we promote South African products. The national strategy would involve the cotton growers, the button manufacturers, cotton weavers, cotton spinners and | SUP 3 – 3<br>The meat industry is highly competitive. Our major competitive issues are:<br><br>(i) Competition from other meat sellers such as butcheries that charge prices that do not reflect the quality of meat. We produce Super Triple A meat products that are very price sensitive.<br><br>(ii) We also have problems with lack of a constant good quality local supply base.<br><br>(iii) Another issue is the high operating costs due to imported machines that we use. The high operating costs are in addition to the high cost of importing these machines. |

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| | | mills and garment manufacturers. We have got to find a way of integrating our processes in South Africa if we are to be competitive.<br><br>(iii) The difficulties caused by competition from overseas are also worsened by the fact that we are not geared towards export. Our focus has been the local market. | |
| **Cost Management with Customer (Manufacturer)** | | | |
| 4 What is the estimated ratio of sales specific to your customer? | SUP 1 – 4<br><br>About 0.005% of our total sales or about R500 000 per year is our business with MANU 1. | SUP 2 – 4<br><br>We are a dedicated supplier to our customer, hence all our work is 100% meant for MANU 2. | SUP 3 – 4<br><br>Our sales to MANU 3 are about 5% of our totals sales. We sell lean beef mince meat and shin to MANU 3. |
| 5 How do you interact with your customer on cost management issues such as:<br>**(a) Cost targets** | SUP 1 – 5<br><br>(i) As far as cost targets are concemed, we negotiate with our customer MANU 1. We also advise MANU 1 about our strategies to achieve them. We discuss how these cost targets and the strategies to achieve them would apply to MANU 1.<br><br>(ii) However, due to the nature of the industry, targets and strategies are not always feasible and achievable respectively. | SUP 2 – 5<br><br>(i) MANU 2's workstudy department does the costing of the garments. The cost established based on the garment style and specifications, is then tested against what can be commercially sold to their customers (trading divisions). Adjustments are made to make sure that MANU 2 will be able to meet the selling price of the customers.<br><br>(ii) MANU 2 then gives us the estimated cost of labour per garment (in terms of allowable minutes). If we cannot meet that cost, i.e. our labour cost is more than the expected labour cost, we at times give them a discount.<br><br>(iii) However, these days MANU 2 does not give us the allowable time per garment; they keep it a secret. They want us to tell them what we think the time | SUP 3 – 5<br><br>(i) Our key customer's Buyers understand the prices of meat in the industry very well. They look at prices in newspapers, consider what their customer is willing to pay, what their product costs should be and then negotiate with us in terms of cost targets per kilogram of meat.<br><br>(ii) Thus cost targets from the customer are negotiated. When we negotiate with the customer, we also take into account the cost of the meat, the labour required to process it, e.g. the cost of removing bones from the meat. Our customer's Buyers fully understand our cost structure. |

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| | | should be. If we say 20 minutes, for instance, they can say, ok we can give you 22 minutes. This would show us that we would have under-costed the garment. If we say 28 minutes for example, they would say we should reduce to say 25 minutes. Sometimes the 28 minutes are used for bargaining; our estimated time could probably be 23 minutes. So if they give us 25 minutes, we benefit. | |
| **(b) Training and assistance** | We provide training and assistance to MANU 1 as and when needed. This is done especially with new products that would have just been launched and such assistance is aimed at cost management. For example, we train MANU 1's machinists how to use our new products on their garments. We give them advise on the garment fabric, style and wash on which our products are appropriate. | We established a training centre, which we refer to as the Learnership Centre within our company. We give advice to MANU 2 as far as the learnership programme is concerned. They do not understand this concept, so we help them. | We have a symbiotic relationship with MANU 3bardi. We help our key customer as far as the best way of using our products is concerned. They in turn help us with issues such as hygiene standards because they are a very professional company. |
| **(c) Delivery scheduling** | Our customer, MANU 1 specifies the required delivery dates when an order is placed. Our company then confirms the order and delivery date by fax. We also at times negotiate another delivery date if the required date cannot be met. | (i) Delivery schedules are very important in our business. As a CMT, we receive the inputs (fabric and trims) from our customer and then we convert them into garments. If there is a delay in getting the inputs, we are forced to work overtime, thus pushing our costs up.<br><br>(ii) We make sure that we communicate with our customer, in writing, about the cost implications of late deliveries. By communicating with our customer in writing upfront, we are in a position to | Our customer came up with specific delivery schedules that we have been following over the last 6 years. We deliver our product to the customer's factories on Mondays, Wednesdays and Fridays before 10: 00 am. They place orders two days in advance. Therefore we are fully aware of our commitment to them in terms of what they want and when they want it. This helps us in planning our tasks and processing of meat. |

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| | | manage costs caused by late deliveries of inputs. | |
| **(d) Product design** | We do not have much interaction as far as product design is concemed. | Our company specialises in only two garment types – blouses and intimate wear. We advise our customer on issues such as the appropriate fabric for a garment. For instance a certain fabric can work well with a given garment style. If you change the garment style/design, then the same fabric may not produce a cost effective garment. | (i) Our customer specifies the size of the meat, (mince meat and shin), the fat content of the meat, the strength of the packaging, and weight of each meat bag.<br><br>(ii) For mince meat, our customer requires us to use two different blades; a 13 millimetre blade and a 5 millimetre blade. The shin is cubed and its size is 20 millimetre by 20 millimetre.<br>The strength of the packaging should be 30 microns. |
| **(e) Other (please specify)** | None. | (i) We also collaborate with our key customer to manage costs of investments in our factories. For instance, instead of us buying a specialised machine that we may just use once a year, MANU 2 buys the machine and then lends it to us periodically. The same machine may also be lent to other CMT suppliers that deal with MANU 2. That way, we manage to reduce the cost of investment by, in a way, sharing the cost of one machine among all the eight CMTs. This in tum reduces the cost of garments that we make in our factories<br><br>(ii) Also we have an arrangement with our customer such that we are responsible for certain items that would be difficult for our customer to manage. For instance, with regard to fused collars, we used to request them from our customer each time we needed to use them. That | (i) We meet regularly to discuss new products that MANU 3 are coming up with. We then go back to our factory to come up with products that can satisfy the customer's requirements. During these meetings, we get to know exactly what the customer requires and we can also give them advice in terms of how best to utilise our products.<br><br>(ii) Our interaction is aimed at reducing costs arising from late deliveries, poor quality meat and incorrectly cut meat.<br><br>(iii) Our relationship with MANU 3, enables us to:<br>(a) achieve cost savings and<br>(b) maintain a long-term relationship that is based on trust. |

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| | | process was costly.<br><br>Now we are responsible for the fused collars and our customer gives us enough money to buy the number of meters of the material. Thus we manage our own costs of handling the material. We are expected to use the agreed length of the material and if we are not efficient and use more, then that becomes our problem.<br><br>(iii) Our customer also uses its buying power to negotiate lower inputs costs from fabric and trim suppliers. Because we are 8 CMTs that supply MANU 2, all our fabric and trim needs are combined into larger orders. This way our customer is able to get lower prices from suppliers and this translates into huge cost savings.<br><br>The larger orders placed with fabric and trim suppliers also help in relationship building.<br><br>(iv) As I said, our customer only works with 8 CMTs (we are also called preferred suppliers), and they try to makes sure that our factories are always fully booked. Our customer always supports us, even when times are hard (low activity periods in the market). For instance, during this difficult period, our customer asked us to increase our output to enable us to increase our turnover as a way of keeping our unit costs down.<br><br>Thus the support that we have received from our customer in form of the more | |

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| | | business has resulted in our company growing over the years, from a company with 25 employees to the current 300 machinists. We have achieved profitability levels that have kept us buoyant even in turbulent times.<br><br>(v) Six months ago, we initiated MANU 2/CMTs meetings. These are meetings that involve our customer and all the CMTs that supply MANU 2. The idea here is to discuss issues of common interest such as productivity, cost savings and training. Thus instead of CMTs competing against each other for MANU 2 business, we decided to come together and work towards our common good by focusing on areas of mutual concern.<br><br>Problems that all CMTs may have concerning the quality of fabric and trims are discussed with the customer. Solutions that benefit all CMTs are then suggested.<br><br>So far we have been able to solve problems related to lead times for buying special shades of thread and the duplication of cutting information given to the customer by the CMTs.<br><br>(a) With regard to the lead times, we agreed that the customer should supply all CMTs with swatches for them to order thread way ahead of production.<br><br>(b) It was agreed that cutting information be sent to all CMT | |

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| | | co-ordinators soon after a garment style is agreed upon. In the past, we used to send such information to our customer's Accounts Department, and then after that, the customer's CMT co-ordinators would request the same information from us. | |
| 6 If cost savings are created along your supply chain with your customer, how are they shared? | SUP 1 – 6<br>Cost savings achieved from the interaction we have with MANU 1 are translated into better pricing. We both adjust our margins to reflect the cost savings. Thus we get more business from our customer, resulting in increased profitability. | SUP 2 – 6<br>We share the benefits in terms of margins that we both get. We have an open relationship in that our customer knows our margins and costs. | SUP 3 – 6<br>If we achieve cost savings, we always make sure that our customer benefits. We reduce our selling price, so that they can also reduce their cost of products. Thus cost savings are shared through adjusting our margins. |
| 7 Do you feel the sharing is equitable? Why? | SUP 1 – 7<br>Yes. We both benefit in that our customer gets better prices and we get more business. | SUP 2 – 7<br>It is because we both benefit. | SUP 3 – 7<br>Yes. We are still in the relationship. If the sharing of cost savings was not equitable, we would not have been able to continue doing business with our key customer. |
| 8 Does your customer's buying behaviour influence the way you manage costs along the supply chain? If so, how? | SUP 1 – 8<br>(i) Yes. When MANU 1 places orders with a required delivery date that is realistic (subject to standard lead times), our company delivers the order using the cheapest method, i.e. road transport. Road is cheaper but it takes six days for the trims to reach MANU 1. Thus due to the way our customer orders, we are able to plan ahead and hence enable us to use the cheapest mode of transport (road), resulting in cost savings.<br><br>(i) The nature of the clothing industry requires such short lead times that orders need to be delivered using the quickest method, i.e. air freighting, which increases our costs. | SUP 2 – 8<br>(i) Yes, our customer's ability to bring work into our factory on the agreed time has an impact on our ability to manage our labour costs. The ideal situation is that the booking of garments into the factories is done as and when agreed. Sometimes our customer does that, but there are times when they do not.<br><br>(ii) No matter how quickly and efficiently we can bring our factory on to line, our customer has to equally bring the full basket (fabric and trims) of what we need on time. Our customer is better than the other companies that we have worked with in the past.<br><br>(iii) However, our | SUP 3 – 8<br>(i) Yes, bulk buying results in our costs going down. What happens is that during winter when MANU 3's meat requirements increase, the first two weeks are hectic for us. We have to increase our capacity and the number of people we employ in the factory. As a result, within those two weeks, our costs go up.<br><br>(ii) However, when our production has stabilised and we are coping with double orders, our costs actually go down. This is because of the increase in the capacity utilisation and the fact that certain costs remain constant, i.e. our fixed factory costs.<br><br>(iii) Our customer's professional approach to ordering, (i.e. we know what they want and when they want it), |

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| | | customer's planning needs to be in synch with ours. When the fabric and trims are not delivered on time that forces us to work overtime in order to still meet the garment delivery date agreed when we entered into the agreement in the first place. For every day that the fabric and trims are delayed from the customer's side, we have got to add two more days to the period that we should have taken under normal circumstances. | enables us to plan in advance in terms of capacity and our own orders of beef from our suppliers. |
| 9 What key cost drivers does your company manage in relation to your customer? | SUP 1 – 9<br>We focus on:<br>(i) input costs, i.e. the nature of materials that we use to manufacture trims as required by our customer, and<br><br>(ii) transport costs of delivering the trims to MANU 1. | SUP 2 – 9<br>We manage labour costs. This is done in the context of on-time delivery of inputs from our customer. | SUP 3 – 9<br>We have had a consistent and long-term relationship with MANU 3 such that there are standing orders that we are fully aware of. As such, we can plan in advance in terms of the number of operators in the factory required to satisfy our customer's requirements. |
| 10 Do you understand the cost drivers in your customer's account? | SUP 1 – 10<br>No we do not. This is because we do not share cost information. | SUP 2 – 10<br>Yes, their cost drivers are<br>(i) input costs (fabric and trims),<br>(ii) labour costs and<br>(iii) quality of fabric and trims. | SUP 3 – 10<br>We do not have an idea of our customer's costing. Our understanding of our customer's costs is limited to the cost of the beef products that we supply them with. |
| **Cost Management within your Company** | | | |
| 11 Where do you focus your cost management efforts within your company? | SUP 1 – 11<br>We place emphasis on the following areas:<br>(i) Correct sourcing of raw materials<br><br>(ii) Production efficiency in the factory<br><br>(iii) Efficient running of divisions, with a strong focus on cost reduction.<br><br>(iv) Thus we achieve cost reduction from operating our divisions efficiently, as well as efficiency in the production process. | SUP 2 – 11<br>(i) We take a holistic view when it comes to cost management within our company. Cost management should work as a conveyor belt: all the inputs are here on time, the work is done efficiently and on time, there is a good return on the use of the machines, and then the money will come out.<br><br>(ii) On specific issues, we focus on<br><br>(a) labour efficiency and<br>(b) productivity through training. | SUP 3 – 11<br>(i) The meat industry is a very technical one. As such we focus on the following:<br><br>(ii) The way we cut the meat. If we do not cut the meat according to our customers' specifications, then we have problems, i.e. they return the meat to us. We make sure that where we are required to use a 13 mm blade, we do exactly that, and not use a 5 mm blade.<br><br>(iii) The correct meat-to-fat ratio of is also important. We have to make sure that the mix is right, otherwise our |

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| | (v) We also strive to maintain high customer service levels as a way of getting more business, which results in larger orders, which ultimately results in lower cost per unit. However, where it is not detrimental to customer service, we try to use a delivery method that reduces transport costs.<br><br>(vi) Correct sourcing, efficiency in the production process as well as the efficient running of departments, all result in improved profitability. | (iii) Our approach every month is to look at the bottom 30 percent of achievers. We then work as a team, the good performers and the underachievers, to find solutions. The good performers share their knowledge and experiences with the underachievers to come up with solutions that can be implemented to improve productivity.<br><br>(iv) Thus our factory employees are constantly learning from each other to find better ways of doing things. | customers will not accept, say too much fat or too little.<br><br>(iv) We also give a lot of attention to the efficiency of our factory personnel. Meat is highly perishable, hence we have to make sure that we work on the meat that we have in the factory within the right time (as short a time as possible).<br><br>(v) Failure to cut the meat properly, have the right meat-to-fat ratio and working fast enough to process the meat all result in losses. |
| 12 How do you measure cost savings achieved through strategic cost management? | SUP 1 – 12<br><br>Each cost/profit area in our company has a budget against which actual results are measured. For example, with regard to our transport budget, we strive to spend less than the budgeted amount. | SUP 2 – 12<br><br>(i) Cost savings are measured in terms of time savings per garment, which are then converted into monetary savings.<br><br>(ii) The cost savings are shown in the daily reports that I receive from the Finance department. The figures are reported according to production lines, with a profit shown in green colour and a loss in red. | SUP 3 – 12<br><br>(i) We measure cost savings in terms of budgets. We have a budget for:<br><br>(a) working hours,<br><br>(b) packaging, and<br><br>(c) maintenance of the factories.<br><br>(ii) Also we measure what we get from a block of meat against the standard output to establish the level of waste. |
| 13 How often do you report the cost savings?<br><br>To who in your company are such cost savings reported? | SUP 1 – 13<br><br>The cost savings are reported as variances in management reports on a monthly basis to the General Manager. | SUP 2 – 13<br><br>The savings are reported on a daily basis by our Finance department. The cost savings are reported to me (Managing Director). The cost savings are reported per garment style and production line. | SUP 3 – 13<br><br>Cost savings are reported on a weekly basis. We have weekly meetings that include the Chief Executive Officer, the Finance Director, Production Manager and Sales Manager. |
| 14 Who drives the cost management practices within your company? Please explain the nature of their responsibility. | SUP 1 – 14<br><br>The General Manager sets out the strategies and it is the responsibility of each manager of a cost/profit centre to own and drive the initiative in each area. | SUP 2 – 14<br><br>Factory Managers and their teams are responsible for cost management. Each production line is regarded as a division and each divisional Head is responsible for cost management in his/her line. Up the hierarchy, each Factory manager is | SUP 3 – 14<br><br>Cost management is a team effort headed by the Finance Director. The Finance Director helps us to understand the reports that are produced by the Accounting department that reflect how we are doing in the company. Cost management is effected through |

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| | | responsible for cost management in his/her factory. | budgets, i.e. our performance is compared to budgets and then the Finance Director highlights where we need to improve. |
| 15 Does your company have a set of tools/techniques used for strategic cost management?<br><br>If so, what are they? | SUP 1 – 15<br><br>(I) We use the budgetary system for cost management. Budgets are set and reviewed often.<br>(II) We also use total quality management. This is a key tool that enables our company to maintain standards world-wide. Quality standards are adhered to throughout the process of making our products. We source our inputs from suppliers that maintain high quality standards. We also train employees to ensure that we get the best quality from our factories. Our top management drives the process of achieving these high quality standards.<br><br>(III) We also benchmark our costs against other companies that produce similar products. Benchmarking allows us to set cost targets for our products. This is particularly important due to the intense global competition. | SUP 2 – 15<br><br>(I) We use a budget to manage our costs. The budget is set once a year and we review it one every three months.<br><br>We look at any unusual trends in the figures produced.<br><br>(II) We also have monthly Executive Meetings where we review the monthly results. In these meetings, we look at what each production line's return should have been against what is actually achieved. This is possible because each production line has an allocation in terms of its required return.<br><br>(III) In other words we breakdown the entire factory into production lines and look at the return from each line. We know the cost of running each line (the expected labour time in monetary terms plus the cost of running the machines). We then look at the value of each line's output to asses the profitability of each production line. Lines that are not generating a positive return are then investigated to find out whether the source of the problem, i.e. inefficiency of labour, waste etc.<br><br>(IV) We also focus on quality as a way of managing our costs. In fact our motto is: Quality, Productivity, and Teamwork. We | SUP 3 – 15<br><br>(I) Our main tool is called the Block Test. We know the standard output from each block of meat, e.g. the kilograms of mince meat, sausages and shin that are expected from a block of meat.<br><br>(II) We then compare the actual output against the standard output and the difference reflects waste or efficiency levels in the processing of the block of meat. This tool enables us to reduce costs by focusing on areas where there is waste.<br><br>(III) We also compare the expected cost of a kilogram of processed meat, e.g. sausages against the actual cost. For instance, we know the quantity of meat, the fat content and the spices that we need to produce say 100 kgs of sausages. We then use the ingredients and then divide the total cost thereof with the weight, i.e. 100 kgs. That gives us the cost per kilogram. We then compare the actual cost with the estimated or standard cost.<br><br>(IV) The difference between the estimated cost and the actual cost tells us whether we are making or losing money. We take corrective action to reduce costs where we are losing money. This is achieved through the correct way of cutting meat, which results in improved beef yields.<br><br>(V) Budgets are also used to guide us in terms of what we should |

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| | | achieve improved profitability by focusing on quality, productivity and teamwork.<br><br>(a) As far as quality is concerned, for every production line that we have, we also have a Quality Supervisor. Quality is very important; you cannot work in this industry if you can't produce a good quality garment.<br><br>(b) Productivity is enhanced by training. Hence we established the Learnership Centre that is meant to improve employee skills. The skills acquired are then used to increase efficiency; a requirement in the highly competitive environment that we operate in. It is important for learning to take place alongside the production floor due to tight margins, intense competition and the quick turnaround times within the textile sector.<br><br>(c) Teamwork entails employees working together and learning from each other as I explained earlier. Thus we always strive for continuous improvement through transfer of knowledge within a team-based working environment. | spend. We compare the amount of money spent on factory machine maintenance for example, with the budget to see whether we have spent more of less. Budgets are reviewed weekly and areas of concern are raised and corrective action taken. |
| **Cost Management with key suppliers (Tier II, III etc Suppliers)** | | | |
| 16 How do you manage costs of doing business with your key suppliers? | SUP 1 – 16<br><br>(i) Our inputs come from our sister companies because we are a vertically integrated company. As with SUP 1, our sister companies are charged with the responsibility of effective cost management. | SUP 2 – 16<br><br>Apart from the fused collars that we manage, as per the arrangement with our customer, MANU 2, we do not have much contact with other suppliers. Our main task within the supply chain is to manufacture | SUP 3 – 16<br><br>(i) We manage the cost of doing business with our main suppliers by doing the following.<br><br>(ii) We negotiate the price of meat that we buy from the abattoirs. We try to get the best possible price for the right quality of meat. |

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| | (ii) We use full cost transfer pricing based on the group policy. The transfer prices are also linked to quality management that is seen from a group level as adequate to ensure that we can compete favourably. This approach ensures that companies transferring intermediate products within the group do not also transfer their inefficiencies to those receiving the products.<br><br>(iii) We meet regularly with our sister companies to discuss costing and efficiency issues. | garments in our factories. | (iii) We also communicate to our main suppliers our target selling price per kilogram of meat. We then negotiate the price that they should charge us, putting into account our margin and their margin. Thus the price we pay is a negotiated price.<br><br>(iv) We also have a very strong quality focus as a way of reducing the costs of returns. If we buy poor quality meat and then supply our customer with such meat, they return it at our own cost. In the long-run, that has potential to hurt our relationship with customers.<br><br>(v) Our suppliers are fully aware of our delivery schedules. They supply us on a weekly basis on Mondays and we adhere to these delivery schedules to make sure that we get the meat at the right time, ready for processing.<br><br>(vi) The delivery of the meat from our suppliers has to be done at the right temperature. As I said earlier, meat is highly perishable and the right temperature has to be maintained at all times during the delivery from our suppliers. Otherwise we would process meat that will produce products that would not achieve their required shelf-life in the customer's stores. |
| 17 Do you encourage your key suppliers to use strategic cost management? If so, how? | SUP 1 – 17<br><br>(i) Yes, it is a company policy. Cost management is driven by top management and every operating division has that responsibility to ensure the profitability of the group.<br><br>(ii) During quarterly group meetings, we | SUP 2 – 17<br><br>N/A | SUP 3 – 17<br><br>(i) We encourage our suppliers to be cost-effective through price comparisons. We benchmark our suppliers' prices against other suppliers to make sure that we are not paying too much.<br><br>(ii) On the quality aspect, we return any meat that is not up to |

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| | also discuss cost management issues and share ideas on how we can reduce costs from a group's perspective. | | standard. This way our suppliers are encouraged to produce the best meat quality that will meet our own standards. |
| 18 What are the benefits that accrue to your company from the use of strategic cost management with your key suppliers? | SUP 1 – 18<br>We benefit from the ability to supply the market with better-priced fastening products. This increases our sales, resulting in improved profitability. | SUP 2 – 18<br>N/A | SUP 3 – 18<br>(i) We get a consistent supply of good quality meat.<br><br>(ii) Adhering to the agreed delivery schedules means getting our meat supplies on time and that enables us to meet our processing timetables as agreed to by our customers. This way we meet the customer's delivery times, as well as avoiding the cost of idle time in our factory.<br><br>(iii) Also, our quality focus enables us to get the Block test right. If we get the right quality, it means that our expected meat block output will come right, provided we cut the meat correctly. Thus we reduce the cost of waste.<br><br>(iv) All the above increase our bottom line. |
| 19 What are the benefits that accrue to your key suppliers from the use of strategic cost management with your company? | SUP 1 – 19<br>Our suppliers (sister companies) benefit from increased sales due to better pricing. | SUP 2 – 19<br>N/A | SUP 3 – 19<br>(i) Our suppliers benefit from a long-term relationship with us. The long-term relationship means more business from us.<br><br>(ii) They also save money by sending us the right product, i.e. they avoid returns from us. |
| 20 How are these benefits measured and communicated within your company and with your key suppliers? | SUP 1 – 20<br>(i) At inter-divisional meetings held quarterly, budgets, strategies and results are reviewed.<br><br>(ii) Also monthly reports show the benefits generated and are used for the purposes of communication. | SUP 2 – 20<br>N/A | SUP 3 – 20<br>These benefits are measured in terms of:<br><br>(i) Block tests (meat products expected against the actual output).<br><br>(ii) We also look at our ability to meet the customer's delivery times.<br><br>(iii) The weekly review of budgets also indicates how profitable we are. |

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| | | | (iv) Communication in the company is through the weekly meetings that we have.<br><br>(v) We communicate benefits of our relationship with the suppliers during price negotiations. |
| **Cost Management customer's customer (Retailer)** | | | |
| 21 How does you company interact with your customer's customer (retailer) in managing costs along the supply chain? | SUP 1 – 21<br><br>(i) Our interaction with RET 1 is aimed at costs management by focusing on quality.<br><br>(ii) The only interaction is through the requirement by RET 1 to supply the item (zippers) at the very best price. Our interaction is aimed at discussing quality-related issues. For example, we jointly set standards with RET 1 which are now being used by the South African Bureau for Standards. | SUP 2 – 21<br><br>We continuously communicate at all levels with our customer's customer. Top people in our company talk to top people in our customer's customer. Middle people talk to middle people. | SUP 3 – 21<br><br>(i) Our interaction with our customer's customer (RET 3) is through the standards and specifications that we have to meet in order to be listed as an approved supplier. RET 3 specifies the hygiene standards that we have to attain and the quality of meat that we should supply to their supplier (MANU 3).<br><br>(ii) Our interaction is indirect in that these specifications are conveyed to us via their supplier (MANU 3). |
| 22 How often do you interact with your customer's customer? | SUP 1 – 22<br><br>We do not have regular interaction with our customer's customer in managing costs along the supply chain. | SUP 2 – 22<br><br>We communicate all the time. We make them aware of the initiatives that we are making, for instance the establishment of the Learnership Centre. | SUP 3 – 22<br><br>We interact on a monthly basis with the MANU 3 employee who represents RET 3's interests in terms of the standards and specifications that we have to meet. |
| 23 What are the benefits that accrue to: (i) your company, and | SUP 1 – 23<br><br>(i) We have developed a stronger relationship based on trust. This enables us to supply cost-effective products at the right price and at the right time. | SUP 2 – 23<br><br>(i) We have developed trust that enables us to work closely. This close relationship enables us to get more business. | SUP 3 – 23<br><br>(i) Over the years, we have managed to establish a long-term relationship with RET 3. As a result of the long-term trust-based relationship that we have, we manage to get more business from them. RET 3 has a number of suppliers in their food sector and because we are a listed supplier of meat products, we get more business from other RET 3 suppliers, apart from MANU 3.<br><br>(ii) RET 3 specifies exactly what they want and this helps us to plan, particularly in terms of |

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| | | | our infrastructure. We know the direction of their business needs and then we invest in infrastructure geared to satisfy such needs. |
| (ii) your customer's customer, from the interaction that you have? | (II) RET 1 is assured that they will receive the best quality garments at the right price and time from their supplier whom we do business. This is because their supplier would have received good quality inputs from us at the right price and time. | (II) RET 2 gets the best quality garments at competitive prices. | (III) Our customer's customer gets the right product on time, at the right price and quality. |
| **General strategic cost management issues** | | | |
| 24 Are there other issues regarding strategic cost management within your company and in your relationship with your customer (manufacturer) and your customer's customer (retailer) that you would like to discuss? | SUP 1 – 24<br>None. | SUP 2 – 24<br>We think that an area where we could also reduce costs is the packing area. Our customer requires us to pack each garment in its own plastic bag. The garments are then delivered to the customer. The plastic bag is then torn and thrown away; it is just a dust cover.<br><br>We are in the process of negotiating with our customer to put two garments in each bag in order to reduce costs. | SUP 3 – 24<br>None. |

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## DATABASE FOR RETAIL COMPANIES: INTERVIEW RESULTS

| RETAILERS | Supply chain 1 Retailer 1 | Supply chain 2 Retailer 2 | Supply chain 3 Retailer 3 |
|---|---|---|---|
| **Company Name** | **RET 1** | **RET 2** | **RET 3** |
| **Job Title** | Supply Chain Executive[1]/ Senior Manager – Textile Operations | Merchandise Manager | Supply Chain Executive[1]/ Supply Chain Manager – Foods Division |
| **Period with Company** | 34 years | 3 years | 22 years |
| **Period in Position** | 7 years | 3 years | 4 years |
| **Company Background** | | | |
| 1 What are your company's estimated sales in 2002? | RET 1 - 1<br>Our sales in 2002 were between R5billion and R10 billion. | RET 2 – 1<br>We achieved sales between R1.2 billion and R3 billion | RET 3 – 1<br>Our sales in 2002 were between R5billion and R10 billion. |
| 2 What is the major business of your company? | RET 1 – 2<br>Our major business in retail is textile (clothing and home-ware). We also have financial services. We operate in 20 countries and we have a total of 180 stores. | RET 2 – 2<br>We sell women and children's clothes as well as footwear. | RET 3 – 2<br>Our major business in retail is foods. We also have financial services. We operate in 20 countries and we have a total of 180 stores. |
| 3 What key competitive issues are facing your company? | RET 1 – 3<br>(i) We have just come out of a period where inflation was high. As such most of our agreements such as salary packages and some inputs and services were negotiated with suppliers and service providers respectively, with the high inflation in mind. This results in high input costs.<br><br>On the other hand, due to the fall in inflation, we are now able to charge lower prices for our goods. Thus we have two different worlds trying to meet, and that creates pressure on the bottom line.<br><br>(ii) We are currently working on simplifying our | RET 2 – 3<br>(i) The major challenge that we are dealing with is the fluctuation of the Rand against the US dollar. In the past three years, the Rand went down against the US dollar, making our imports very expensive. We import fabric, trims and garments from overseas suppliers.<br><br>(ii) In line with the first point, right now the Rand has strengthened against the US dollar, thus making our imports cheaper. However, we have entered a period of deflation, which means we have to sell our garments at lower prices relative to the prices we could fetch in the past. Our | RET 3 – 3<br>(i) We have just come out of a period where inflation was high. As such most of our agreements such as salary packages and some inputs and services were negotiated with suppliers and service providers respectively, with the high inflation in mind. This results in high operating costs.<br><br>On the other hand, due to the fall in inflation, we have to charge lower prices for our goods. Thus we have two different worlds trying to meet, and that creates pressure on the bottom line.<br><br>(ii) We are also in the process of trying to simplify our business in order to drive waste out of our operating costs. |

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[1] The Supply Chain Executive answered questions 1 to 3. The rest of the questions were answered by the respective managers of the Textile and Food Divisions. The Supply Chain Executive has been with the company for 4 years.

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| | operations in order to drive waste out. We still have a lot of manual processes that require a lot of reconciliation. For instance, we do not have a fully integrated stock ledger. With the textile division for instance, we only receive stock when the garments reach our stores, not when they are still in our Distribution Centre. All these things create a lot of complexity within the business.<br><br>(iii) We are also working on improving our planning so as to optimise our planning function in stores. This is meant to provide our suppliers with a better quality forecast and order profile for our stores. We are spending a lot of money in that area to both improve stock availability and reduce our operating costs.<br><br>For instance, if we can tell our suppliers what is going to happen next week and the week after that, they can then plan their operations properly. Currently we (our key suppliers and us) are second-guessing.<br><br>(iv) We have challenges of providing better quality for our customers – better quality than our competitors.<br><br>(v) We are also grappling with the new legislation on plastic bags. I think that the legislation produced the desired effect as far as removing plastics from the system is concemed. However, | margins are thus lower and we can only try to improve our profitability by increasing the volume of sales. That is a challenge; it is not easy.<br><br>(iii) We also have to try and balance the price that we charge and the perceived value of the garments that we sell to the public. Achieving a price-value ratio that will allow us to compete with other retailers is not easy.<br><br>(iv) Lastly, making sure that our CMT suppliers have adequate orders that will make them cost-effective is also a challenge. We have to make sure that their production lines are busy in order to reap the benefits of economies of scale. | We still have a lot of manual processes that require a lot of reconciliation. For instance, we do not have a fully integrated stock ledger. With the textile division for instance, we only receive stock when the garments reach our stores, not when they are still in our Distribution Centre. All these things create a lot of complexity within the business.<br><br>(iii) We are also working on improving our planning so as to optimise our planning function in stores. This is meant to provide our suppliers with a better quality forecast and order profile for our stores. We are spending a lot of money in that area to both improve stock availability and reduce our operating costs.<br><br>For instance, if we can tell our suppliers what is going to happen next week and the week after that, they can then plan their operations properly. Currently they are second-guessing or we are giving them blinds, which is not very accurate.<br><br>(iv) We have challenges of providing better quality for our customers – better than our competitors.<br><br>(v) We are also dealing with the effects of the new legislation on plastic bags. I think that the legislation produced the desired effect as far as removing plastics from the system is concemed. However, for retailers, it has had operational problems.<br><br>For instance, customers' shopping pattems have changed in that they tend to go fewer times to the stores, or if they go, a lot of them are not prepared to pay for the |

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| | for us, it has had operational problems.<br><br>For instance, customers' shopping patterns have changed in that they tend to go fewer times to the stores, or if they go, a lot of them are not prepared to pay for the bags. As a result, they could just put their product in the trolleys and walk out of the stores, resulting in high shrinkage in our stores.<br><br>The problem is that our points of sale are not near the exit. So when customers walk to their cars, they pass through some of our departments, e.g. clothes. Some of the customers can pick clothing items and put them in the trolleys. It is very difficult for us to control such behaviour. We have had to employ people who check at the exit, thus increasing our operating costs. In addition to the increase in costs, checking is also uncomfortable to our customers, thus creating a lot of problems for us. | | bags. As a result, they could just put their product in the trolleys and walk out of the stores.<br><br>The problem is that our points of sale are not near the exit. So when customers walk to their cars, they pass through some of our departments, e.g. clothes. Some of the customers can pick clothing items and put them in the trolleys. It is very difficult for us to control such behaviour. We have had to employ people who check at the exit, thus increasing our operating costs. In addition to the increase in costs, checking is also uncomfortable to our customers, thus creating a lot of problems for us. |
| **Cost Management with your key Supplier (Manufacturer)** | | | |
| 4 What is the estimated ratio of your purchases specific to your key supplier? | RET 1 – 4<br><br>We purchase about 6% of our garment needs from MANU 1 and the company is our number one supplier in the whole textile division. | RET 2 – 4<br><br>We buy about 40% of our garment needs from MANU 2. However, the garments that we buy from MANU 2 are those items that they excel at, like top of the range women clothes. Also over the last few years, the children's clothes supply base in South Africa shrank such that we heavily depend on MANU 2. | RET 3 – 4<br><br>Our purchases from MANU 3 are about R70 million per year, which is about 3% of our total purchases. MANU 3 is the 6th largest supplier out of 500 suppliers. They supply about 50 different products to us. |

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| 5 How do you interact with your key supplier on cost management issues such as: | RET 1 – 5 | RET 2 – 5 | RET 3 – 5 |
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| **(a) Cost targets** | **(i)** We give our key suppliers three category ranges of garments – the entry level, the medium and top of the range – garments. These are what we call tiers, i.e. the entry level whose price is the lowest, then the mid-point, which has a better fabric and style, and then the third tier, which is top of the range and is normally meant for very few of our retails outlets, i.e. the top stores.<br><br>**(ii)** Our business is mainly with the mid-point, i.e. it is our key item that we want to turn into core garment. We want each store to have this garment and we set targets for each store in terms of the quantity of stock they should have, colour and sizes. We also set targets at the supplier in terms of quantity that they should also hold in order to meet customer demand.<br><br>**(iii)** Cost targets are set according to the three garment categories. We tell our key supplier the prices that we want to sell the garments at. The selling price and our estimated margin give the supplier what the target costs should be, i.e. the cost of manufacturing the garments.<br><br>**(iv)** In a situation where the supplier cannot contain costs to meet the cost targets, negotiations are initiated with fabric and trim suppliers to find ways of reducing input costs.<br><br>**(v)** The other way of achieving the cost | **(i)** We use cost target to communicate to MANU 2 our expected selling price and margins. Since they are part of the Group, they understand issues from a strategic position. We tell them the expected selling price of each garment style and the margin we expect to get. Their task is to make sure that their costs do not exceed the target cost.<br><br>**(ii)** Our garment Designers work with MANU 2 production personnel to make sure that the cost targets are achieved. They can do one of the following:<br><br>**(iii)** Engineer the garment, i.e. remove or change some of the garment characteristics that do not affect the look and quality of the garment, i.e. change the construction of the garment in such a way that the end customer will not notice. Engineering the garment can also take the form of changing the way the garment is made, i.e. substituting simpler operations for more complex operations. This way, we can then achieve cost reduction that will enable us to meet the target cost.<br><br>**(iv)** MANU 2 can also negotiate with their fabric and trim suppliers for lower input prices. Lower input prices have the same effect; they lower the garment cost, allowing us to attain the target cost.<br><br>**(v)** Where we have done all that is | **(i)** Our product selectors, buyers and product technologists work closely with our key supplier to set cost targets for the products that we buy. For instance we can say to MANU 3, this winter on the soup range we are going to spend R50 million.<br><br>**(ii)** We tell our supplier what our target selling price and our margin are, a function performed by our Buyer. Our supplier gives us the cost of the product in form of a cost-breakdown – cost of ingredients, labour, transport, overheads, packaging and their required margin. We then negotiate the price of the product with our key supplier and once we agree, the price remains the same for the next three months. We then review the price to take into account inflation and other factors.<br><br>**(iii)** If the supplier cannot meet the target cost, then our team and the supplier's team re-engineer the product. This involves deciding what can be removed from the product without affecting the taste of the product. They may also re-engineer the packaging of the product, i.e. what is not adding value on the packaging. The price of the packaging can also be negotiated downwards if we expect that we will achieve high sales volumes.<br><br>**(iv)** Sometimes even after the product and the packaging have been re-engineered, the actual cost is still above the target cost and hence we cannot achieve the target selling price. We can reduce our margin, |

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| | target is to re-engineer the garment in terms of the construction of the garment. This entails the removal of certain of the garment's make-up that do not affect the look of the garment, e.g. we can take out the seam, i.e. taking out the top-notch that was not really adding value. The re-engineering of the garments does not involve reducing the quality of the garment by using cheaper fabric.<br><br>(vi) We may try to use altemative fabric but not low quality fabric. | possible to achieve the target cost and fail, the third alternative is to accept a lower margin, provided we can achieve high sales volume of the garment. This way, we can still be able to achieve our profitability targets. | provided our supplier does the same. We can also consider increasing our selling price slightly, provided we have agreed with our supplier to both reduce our margins.<br><br>(v) If we cannot come to a compromise such that we can meet the target selling price, then the product is not launched. The main objective of cost targets is to make sure that we do not launch a product until we are satisfied that we will be able to meet the target selling price, taking into account our margins.<br><br>(vi) This is the reason why we are in the process of restructuring our New Product Development process so as to make it more structured. The idea here is that before a product is developed, we have to take into account upfront, from a commercial point of view, what exactly we want to do, where the product fits into the Foods Division product category, what do competitors have, what are the expected costs, the selling price and the margins. Once all these have been understood and approved, we can then have a commercial view of the product, and the development process takes place. |
| **(b) Training and assistance** | (i) We embark on joint-training programmes. We have a relationship with MANU 1 that enables our new employees and their new employees to be attached to either company, depending on the skills that we require. So when we employee someone new that we want to understand processes that MANU 1 is good at, we send the | (i) We have joint workshops with MANU 2 employees. This is facilitated by the fact that we belong to the same group. For example, RET 2 and MANU 2 garment designers hold joint workshops where they leam about best practices in their field. These workshops provide us with the platform to leam from each other. | (i) Our technologists spend a lot of time in our supplier's factory to provide the necessary training and assistance that the supplier needs. We also encourage our supplier to employ their own technologists and quality controllers in their Product Development department. We also encourage our key supplier to have international alliances from which they leam |

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| | employee to MANU 1. They also do the same by sending someone to work with our employees. This way, our supplier learns our business and we learn theirs.<br><br>**(ii)** We are users of Duty Certificates that we earn as a result of exporting. We can then import fabric duty-free as a result of the Duty Certificates. One of the requirements for earning the certificates is that we should provide 10% of the duty benefit for training in the Clothing Industry. We have schemes with Cape Technikon and we sponsor our supplier's employees to go to the Technikon and study for diplomas and certificates related to their work. When they finish they then go back and work for our supplier. | | new and efficient ways of producing products.<br><br>**(ii)** We have produced a supplier manual for procedures such as ordering, distribution and payment. The purpose of the manual is to enable our key suppliers to have problem-free procedures that enable them to efficiently process our orders and ways of dealing with problems, for instance if they do not receive the orders on time. There is a help desk telephone number that they can phone with their supplier number and then get help.<br><br>**(iii)** As far as distribution is concerned, the suppliers go to our Distribution Centre and give their order number and then they are told which bay they should go to. We have also specified how the truck should be loaded, i.e. according to the order in which the details of the stock have been written on the order. This facilitates the offloading and checking of stock against the order simultaneously, thus improving truck turnaround time. The time saved results in huge cost savings and the truck can then be used to deliver other products. |
| **(c) Delivery scheduling** | **(i)** We have a system of placing delivery instructions with the supplier that allows the supplier to get accurate information. This enables our supplier to schedule supplies into our Distribution Centre (DC) in such a way the delays are minimised.<br><br>**(ii)** Thus by using electronic data interchange (EDI), we carefully plan | **(i)** We have a calendar that we use as far as delivery scheduling is concerned. This is initiated during seasonal strategy meetings that we hold with MANU 2 personnel. During these strategy meetings, our garment merchandisers communicate to MANU 2 planning section our expected sales units for the | **(i)** Delivery scheduling is planned in such a way that the supplier brings stock as and when the Distribution Centre (DC) is waiting for the stock. Thus the supplier finds a bay waiting for them to quickly unload stock without having to wait. Our ordering system is also automated, which means that our supplier gets accurate order information and delivery instructions. |

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| | with our supplier when supplies will be at the DC and the offloading bay that will be used. This way, we significantly reduce our transport company's truck turnaround time, resulting in cost savings. | entire season, broken down into monthly figures.<br><br>(ii) When we have our sales meetings during which our buyers actually 'buy' a garment concept, we advise the MANU 2 planners of the styles that we want, units of each style, sizes, and the dates by which the garments should be delivered to our distribution centre.<br><br>(iii) On our side, we have MANU 2's lead time-tables give us an idea of how long it will take to get the garments that we have ordered. Consequently, we are able to plan carefully and almost exactly as to when garments will be in our stores to avoid stock-out costs. | |
| **(d) Product design** | (i) We have a Design Centre and MANU 1 have a Design department. Our employees work closely with MANU 1 to develop garment and then present them in workshops together. The people in our company who interact with MANU 1's employees are the Buyers, Designers and Technologists.<br><br>(ii) Our design team comes up with a garment design and then approach the supplier. They then discuss the design, style, fabric trims, and cost. When a garment's concept has been 'bought', two samples are made by the suppliers and then a garment 'showing' (fitting session) is done. If we are happy with the garment in terms of construction and price, then we give the supplier the go | (i) Garment design is teamwork in that our garment designers work closely with MANU 2 through a MANU 2's system called Style Management System (SMS). This system allows our designers to post their designs and also for MANU 2 personnel to access the styles and make suggestions. MANU 2's production people can suggest cost-effective designs, based on what our designers would have come up with.<br><br>(ii) Also, our designers work closely with MANU 2's fabric and trim buyers to make sure that the styles that our designers come up with are cost-effective as far as fabric and trim usage are concerned.<br><br>(iii) At the design stage, we also work | (i) Product design is a teamwork that involves our product selectors and technologists working with the supplier's Product Development Team. Our product selectors come up with an idea of a new product, e.g. butternut soup. They develop products in our supplier's kitchen. Once the product is approved from a taste point of view, it then goes into the factory for another trial.<br><br>(ii) Thus before a product becomes a commercialised product, it has to go through several trials. The kitchen trials are at a small scale under the right conditions. The product is then manufactured in the factory to make sure that we will be able to produce the same taste and quality in the factory. If the factory trails fails, the product goes back to the kitchen |

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| | ahead to produce the garment for our stores. | closely with MANU 2 to make sure that we maintain quality levels acceptable to our standards. Thus fabric and trims are quality-tested before they are used in production. | and then back to the factory until the teams are satisfied.<br><br>**(iii)** The smooth transition of the product from the kitchen to the factory is a joint responsibility between our team and the supplier's Product Development Team. At the end of the day, we want to make sure that when the product is produced in the factory, it comes out the same way it was developed in the kitchen. |
| **(e) Other (please specify)** | **(i)** We make use of our duty credit certificates issued by the Department of Trade and Industry in the Ministry of Industry and Commerce. We are given these certificates because we export garments overseas. Although we import inputs, the value of our imports is less than export hence we generally have a surplus.<br><br>We have a scheme with our supplier that allows them to use some of our unused duty credit to offset the duty that they would be required to pay on fabric imports (duty on fabric is 22% of FOB (Free on Board). This way the supplier brings the cost of fabric down, which in turn brings down the garment cost.<br><br>Given the weak Rand against the US dollar over the last three years, we were able to significantly reduce the cost of fabric to our supplier by using these duty credit certificates.<br><br>**(ii)** We also have strategy meetings with MANU 1 where we share our vision | **(i)** Bulk-buying at the Group level allows us to have more negotiating power with our fabric and trim suppliers. We therefore consolidate our orders in order to get quantity discounts, resulting in cost reduction. | **(i)** We have jointly initiated with our key manufacturer, a process that follows up on the success of the new product development process, i.e. post product launch audit. Once a product has been commercialised and launched, we now review how the products is doing 6 weeks later in terms of:<br>• ***Sales achieved against expected sales***<br>• ***What is the waste level due to the product reaching its sale-by-date?***<br><br>If we do not do this, then we may lose a lot of money. The supplier would have delivered the product according to specifications and if we do not do the revjew, it's our company that may incur huge costs by continuing to buy a product that is not doing well.<br><br>If the waste is due to the supplier's fault, e.g. the product's shelf life is shorter than expected, and then we would do a return to the manufacture and charge the supplier at cost.<br><br>**(ii)** We also encourage our supplier to buy vegetables from the same farmer (supplier) that supplies us with the |

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| | with them. This allows our key supplier to know exactly where they fit in, how they can assist us in achieving the goals in our strategy. For instance, their capital expenditure is influenced by such strategic meetings. They know where they should spend their money in terms of machinery, training research and development.<br><br>We have developed a long-term relationship with our supplier that allows us to share such important information. Our supplier is able to plan properly in terms of the future business according to our vision. If the direction of our business is moving away from soft sewing to tailoring for example, our supplier gets to know about this and plan accordingly.<br><br>These meetings are also meant to talk about what is working and what is not. We have an open relationship.<br><br>(iii) For our imports, we have an international shipping partner and they have negotiated that we combine or consolidate various orders (our orders and our suppliers' orders) into containers. This way we reduce costs of shipping because we pay per container. | | vegetables that we sell in our stores. This increases the farmer's hectrage, resulting in economies of scale that we all benefit from.<br><br>(iii) We have an understanding with our supplier that they should buy 12 week's packaging supply. This allows our supplier to buy in bulk, savings costs. If the product does not do well such that we do not need some of the packaging that the supplier has already bought, we share the costs.<br><br>(iv) We also have strategy meetings with our key supplier. These meetings are meant to enable the supplier understand where we are going as a company, i.e. the nature of products that we want to produce and our target market. This is very useful for planning purposes because our supplier understands where they fit in within our strategy.<br><br>During these meetings we review products that we have already launched together with the supplier. We then look at the products that we want to launch and the expected volumes. These meetings are done once every 6 months. As part of the strategic meetings, we also have joint overseas trips with our supplier where we go and benchmark product around the world. The supplier thus understands where we want to go and then respond by investing in capital (machines & people) in the right direction.<br><br>(v) Our company also does a strategic assessment of key suppliers. We look at things such as: |

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| | | | • ***Do they have the right technical abilities***<br>• ***Do they have the right financial abilities***<br>• ***Do they have the correct human resources policies***<br>• ***Do they have a research and development (R & D) capability***<br>• ***Do they comply with ethical standards***<br>• ***Do they have the capability to diversify***<br><br>We then agree on an action plan where we specify when what needs to be done should have been done. Some of these issues are like a journey, i.e. not achievable quickly and other issues are easily achievable. |
| 6 If cost savings are created along your supply chain with your key supplier, how are they shared? | **RET 1 – 6**<br>Cost savings are shared by way of margins. When we reduce costs with our supplier, we both can increase our margins, i.e. both our company's and supplier's margins. It is a win-win situation. | **RET 2 – 6**<br>The way we do business with MANU 2 is that, MANU 2 is regarded as a cost centre in the Group. As such, they transfer garments to us at cost, i.e. the cost of fabric, trims and labour. Thus cost savings due to working closely with MANU 2 are reflected in the improved profitability of the trading divisions, our division included. We therefore do not have a mechanism of sharing cost savings. | **RET 3 – 6**<br>**(I)** We share cost savings in form of margins. We have target margins that we have to achieve of specific product categories. For instance, the Meal Solutions group might have margins that they have to achieve. They try to balance the basket of the margins in their group depending on whether they are dealing with a new product or not.<br><br>**(II)** For a new product, they may have a critical point of entry (selling price) that they want to target. They can reduce their margin on that particular product and the take a higher margin on another product. The basket of margins balances at the end of the day.<br><br>Thus cost savings are shared by our company and the supplier through margins. |

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| 7 Do you feel the sharing is equitable? Why? | **RET 1 – 7**<br><br>We have a very close relationship with our supplier. We believe that the way we share cost benefits is equitable. We want to benefit but at the same time, we also want our supplier to benefit. Because we have an open relationship, our supplier is free to raise their concern if they feel the sharing is not equitable. | **RET 2 – 7**<br><br>N/A | **RET 3 – 7**<br><br>The sharing of cost savings is equitable in that we agree on margins that we are both happy with. We are not in the business of trying to squeeze our suppliers out of business. If we do not have a win-win situation, then we will not have that supplier; they go out of business. |
| 8 Does your key supplier's product delivery/supplying behaviour influence the way you manage costs along the supply chain? If so, how? | **RET 1 – 8**<br><br>(I) MANU 1 delivers on time – they are very good. When they get delivery instructions from us, they make sure that the garments are in the DC as and when agreed.<br><br>(II) I would say that perhaps the way we give them business actually influences their cost in a negative way. The way we plan our ranges; we have a certain amount of merchandise per month – a mid and end of month input. This is a group of garments of different styles that we ship to our stores so that when they arrive in the stores, you get this particular look. That process causes peaks and valleys.<br><br>Also when we are late in giving them delivery instructions, they can be sitting without work in their factory. When we finally send the delivery instruction that may mean working overtime to make sure that they meet the required order quantity. Consequently, we may have to get extra transport and also we won't be able to pay our supplier on time. | **RET 2 – 8**<br><br>(I) Yes. Sometimes MANU 2 may not plan their lead-times correctly, resulting in late deliveries.<br><br>(II) Other times MANU 2 overbooks in CMTs such that garments are not delivered on time.<br><br>In both cases, we incur costs as a result of stock out. What we do is to either accept the late deliveries, with the hope of being able to sell the garments. Alternatively, we can reduce the units that we buy from them so that we do not have to have markdowns due to unsold stock in our stores.<br><br>(III) However, most of the times, they deliver on time. In fact, sometimes it is our problem in that we place fabric orders late or make decisions like what trims to buy late. That obviously affects MANU 2's ability to deliver on time. | **RET 3 – 8**<br><br>(I) Our key supplier delivers to our DC here in Cape Town. We arrange things in such a way that when our trucks deliver product to stores in the area where our supplier is, the same truck go and pick up finished product from our supplier.<br><br>(II) Our supplier always delivers on time and in the right quantities such that the trucks come back to the DC full of stock. Thus we always achieve full utilisation of the trucks. |

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| 9 What key cost drivers does your company manage in relation to your key supplier? | RET 1 – 9<br><br>(i) We manage the cost of garments that they supply us with.<br><br>(ii) When we issues delivery instructions, sometimes the quantity per store is very small. Our supplier used to deliver garments in a standard box. Due to the way our transport costs are charged – transport costs are charged per volume – it means that unfilled boxes are charged at the same rate as filled ones. Therefore the supplier needs to use the correct size box and consolidate delivery instructions wherever possible, i.e. put more styles in a box. | RET 2 – 9<br><br>(i) The cost of garments and late deliveries. Since MANU 2 transfer garments at cost, the lower the cost, the better our business, and conversely, the higher the cost, the more difficult it is to compete favourably.<br><br>(ii) As I said earlier, late deliveries involve costs and we try to make sure that we work together with MANU 2 to put garments in stores on time. | RET 3 – 9<br><br>(i) Tray utilisation during transporting stock impacts on our cost. We try to make sure that our supplier fills all trays that are delivered to our DC here in Cape Town.<br><br>(ii) For trunk products, i.e. products delivered to DCs in other parts of the country, we use what is called 'Tom bagging' to minimise costs. This involves putting stock in bags and then putting the bags in the trays. This allows us to carry more stock per tray than if we were to carry the stock in the trays. For instance, a tray may only carry 5 units of stock and by 'Tom bagging' we are in a position to carry 20 units in a bag in each tray. |
| 10 Do you understand the cost drivers in your key supplier's account? | RET 1 – 10<br><br>Yes we have an understanding of our supplier's costs. We know the costs of fabric and trims. However, we do not understand the labour cost very much because we are given this in minute rating, e.g. for this garment, the cost per minute is R9.00. We do not understand how they actually come up with the minute rating; we only have a general understanding that they take into account salaries and overhead cost. | RET 2 – 10<br><br>Yes; it is very transparent because we belong to the same Group. The SMS also has the cost breakdown of the garments that we buy from MANU 2. So we see everything – the cost of fabric, trims and labour. | RET 3 – 10<br><br>Our key supplier has what we call 'open costing', i.e. they show us the breakdown of their costs, e.g. labour, material, overheads, packaging, in addition to their margin. This allows us to also suggest where they can reduce costs because we understand what constitute their costs.<br><br>Buy looking at say their fixed overhead cost, we are in a position to say, if you increase your output by this much, then the cost per unit of product should go down by so much. |
| 11 What are the benefits that accrue to:<br><br>(i) your company | RET 1 – 11<br><br>(i) We get a high quality garment at competitive price from a reliable supplier. This improves our bottom line.<br><br>(ii) Most of our garments are manufactured here in South Africa, thus we | RET 2 – 11<br><br>(i) Having MANU 2 in the group was a strategic decision. Over the past years, the garment supply base in South Africa has been shrinking to the point that in other garment lines (such as Kiddies wear), there is no local supply. Thus we are | RET 3 – 11<br><br>(i) Our supplier makes products are different from those of our competitors. This gives a competitive edge against other retailers. Thus without our key supplier, we would not be able to have the kind of products that we have, i.e. the uniqueness of the products. |

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| | have a stable supply base. A stable supply base reduces uncertainty in terms of product supply, resulting in better stock planning.<br><br>**(iii)** Our returns to manufacturer (RTMs) are very low. These arise from unsatisfied customers who bring garments back to our stores. We have an RTM department that accumulates information about all returns to the manufacturer.<br><br>These returns involve huge costs of processing the RTMs. Due to the relationship that we have with MANU 1 and the measures we put in place to ensure good quality, the number of our RTMs is very low. This results in huge cost savings. Our RTM target is 1% in the women's wear that MANU 1 supplies us with. The actual RTM is about 0.47%. | assured of a local supply that is part of our Group.<br><br>**(ii)** Also, any cost savings that MANU 2 achieves such as lower fabric ratings as compared to the planned usage, filter through to our division in form of higher profitability. This is because they transfer garments at cost, i.e. they do not add mark up.<br><br>**(iii)** In line with what I have just said, from a strategic point of view, we can compete favourably with other retailers because we are 'buying' garments at cost, which means that we can charge competitive prices. Thus the benefits of this arrangement are reflected at a Group level in form of improved profitability. | **(ii)** We have also developed a trust-based relationship that we value in such a way that we can share our strategies.<br><br>**(iii)** Our business is growing as a result of the cost effective processes between our company and MANU 3. The growth in our business results in the improvement in our profitability. |
| (ii) your key supplier from the use of cost management along your supply chain? | **(iv)** Our supplier gets paid weekly instead monthly (the normal payments period). This improves their cash flow.<br><br>**(v)** The supplier has grown from our own growth. As we grow, they grow. | N/A | **(iv)** We pay our supplier regularly in such a way that they cannot have cash flow problems.<br><br>**(v)** Also, over the years, the supplier has grown as a result of doing business with us. We concentrate on our key supplier such that as our business grows, they also grow. Financially they are also benefiting.<br><br>**(vi)** We also give our supplier the access to go into our relationship with overseas retailers. When we do joint overseas trips with the supplier, we go and see what our partners are doing, the nature of products that they are selling and the technology that is being used. That way our |

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| | | | supplier benefits tried and tested knowledge and technology, both which result in improved operations in their factory. |
| How do you communicate the benefits arising from cost management with your key supplier? | (vi) The benefits that arise from cost management with our supplier are communicated during the strategic meetings as well as in our daily contact. We have weekly meetings where we discuss production planning and then issues about what is going wrong and right are discussed. | (iv) The benefits of having an in-house supplier are communicated through profitability statements. | (vii) Benefits of what is going on well are discussed during the strategic reviews/meetings that we have with our key supplier. We share the information about the successes that we have had from the products that we have launched. Also, we communicate benefits to our key supplier by giving them more business. If we have new products lines that we want to develop, we give the business to our supplier as a way of showing that we are benefiting from our relationship. |
| **Cost Management within your Company** | | | |
| 12 Where do you focus your cost management efforts within your company? | **RET 1 – 12**<br>(i) We focus on the cost of garments and the running of the departments. We concentrate on:<br><br>(a) the quality of the garments that we buy, and<br><br>(b) on-time delivery of garments.<br><br>(ii) Good quality garments so as to reduce the cost of RTMs.<br><br>(iii) On-time delivery of products to our stores to reduce stock-out costs. | **RET 2 – 12**<br>(i) Most of our costs are sample related. We send our garment Designers and Merchandisers overseas to go and buy samples of garments that we think can sell in South Africa. Such trips cost a fortune, e.g. R50 000 per person per trip, i.e. the cost of flying, accommodation and food and the samples. We reduce costs on such trips by constraining the designers' expenditure within the set budgets.<br><br>(ii) Also, we achieve cost reduction by managing the cost of producing sample in our Design Room. We produce these samples to give to our manufacturer (MANU 2) who in turn give the samples to CMTs so that at | **RET 3 – 12**<br>(i) Our focus is on reducing the cost of products that we buy because our main concern is centred on margins. Margin rules, within RET 3 there is no negotiation about margins; if you are a Buyer, you come in on your margin and that margin is set.<br><br>(ii) We also achieve cost savings by efficiently running departments within the RET 3. |

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| | | the end of the day, we get garments similar to the samples. The cost of these samples is enormous because we have to produce a number of style options per garment.<br><br>(iii) In addition, we spend effort managing the cost of stationery and telephone. We use a lot of paper in the Design Room and we now have bins in which we collect the used paper to sell to companies that re-cycle paper. | |
| 13 How do you measure cost savings achieved through strategic cost management? | RET 1 – 13<br><br>(i) We use budgets that show what we are expected to spend and we compare with what we actually spend.<br><br>(ii) Also cost savings are measured in terms of reduction in RTMs. | RET 2 – 13<br><br>We have budgets and at the end of each month, the Finance Department gives a breakdown of our costs against the expected costs. | RET 3 – 13<br><br>(i) Cost savings are measured for each department in terms of margins, waste, departmental charges.<br><br>(ii) Also cost savings achieved by such initiates as 'Tom bagging', are also reported in the monthly reports |
| 14 How often do you report the cost savings?<br><br>To who in your company are such cost savings reported? | RET 1 – 14<br><br>Cost savings are reported in the monthly management reports.<br><br>Cost savings are reported to management on a monthly basis. | RET 2 – 14<br><br>Cost savings or overruns are reported in monthly management accounts.<br><br>Cost savings or overruns are reported to each departmental head. | RET 3 – 14<br><br>Cost savings are reported monthly in what we call the 'black book'. The report is produced by the Finance department. |
| 15 Who drives the cost management practices within your company? Please explain the nature of their responsibility. | RET 1 – 15<br><br>We use a team-based approach to cost management. | RET 2 – 15<br><br>Our approach is team-based. All the people who work under me are conscious of their role in cost management, and my role is to lead the team. | RET 3 – 15<br><br>Cost management in the Foods Division is a team-based approach headed by Category Managers. A Category Manager has about 5 departments that he/she is responsible for. The Supply Chain Manager is responsible for the overall cost management within the Foods Division. |
| 16 Does your company have a set of tools/techniques used for strategic cost management?<br><br>If so, what are they? | RET 1 – 16<br><br>(i) We use budgets and a balanced scorecard to manage the costs within the company.<br><br>(ii) Budgets set the limits which | RET 2 – 16<br><br>(i) We use budgets that are based on expected style sales.<br><br>(ii) We also have monthly variance reports from the Finance department. | RET 3 – 16<br><br>(i) We have a financial budget at a divisional level (Foods budget), that is then broken down into a departmental level from a sales, cost and waste point of view. The Buyer in each |

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| How are they used? | constrain our expenditure in areas such as purchases and administration of the company.<br><br>(iii) The balanced scorecard informs us in which areas we should be spending, in line with the goals set for the company. | (iii) Budgets are used to give us limits in terms of our expenditure.<br><br>(iv) After a sales meeting, we look at the sample styles that have been sold against the budgeted sales. This helps us to see where we are losing money because as I said earlier, samples consume a lot of money (whether imported or locally made) and it is important for us to see which styles result in business for us, and which ones do not | department is in charge of each budget. Departments are held accountable for achieving the cost targets.<br><br>(ii) We also are in the process of implementing a balanced scorecard. This tool will assist us in managing costs in line with the goals of our company. |
| **Cost Management with your Supplier's Supplier (Tier I Supplier)** | | | |
| 17 How does your company interact with your supplier's supplier (Tier 1 supplier) in managing costs along the supply chain? | RET 1 – 17<br><br>We do keep a tight rein on the quality standards of zippers that we buy from SUP 1. We set standards that were approved by the South Africa Bureau of Standards (SABS). So all of the zippers that SUP 1 supplies MANU 1 with have to conform to the standards approved by SABS. | RET 2 – 17<br><br>Our interaction with SUP 2 is very minimal. All the business that we have with the company is handled by MANU 2. Once garment styles have been designed and agreed upon, it is up to MANU 2 to allocate the manufacture of those garments to CMTs that are best equipped to make them. Therefore our interaction with SUP 2 is indirect, through MANU 2. | RET 3 – 17<br><br>(i) The interaction between RET 3 and our supplier's supplier is the responsibility of our buyers and selectors. They are involved in the design and the negotiation of the price of packaging together with our supplier MANU 3 Foods.<br><br>(ii) The selectors decide what the packaging should look like and the buyer negotiates the price. The buyer also looks at what the production should be from a unit cost point of view. If the unit cost is too high, we negotiate the price either directly with the supplier's supplier or through our supplier.<br><br>(iii) Our supplier's supplier Designers also come here with sample of packaging and how the label looks like. We then look at the thickness of the package, whether it can be used in a microwave, can it oven be used in an oven, new techniques, is the size right for the product and does it look presentable, and is the |

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| | | | right colour.<br><br>(iv) The New Product Development Team in our company gets involved as well because when we conceive a product idea, packaging is part of it. |
| 18 How often do you interact with your supplier's supplier? | RET 1 – 18<br><br>(i) We meet with SUP 1 twice a month to discuss new products that they are offering. If there is something that we want to change, for instance in children's wear where we wanted plastic zippers instead of metal, we meet with SUP 1 and other zipper suppliers to discuss the change.<br><br>(ii) We make sure that we offer all the four zipper suppliers an opportunity to come up with a solution in the case of technical issues. Thus the meetings that we have include all the zipper suppliers.<br><br>(iii) When our suppliers have problems, our two main suppliers (SUP 1 and another supplier) come together to discuss the problem with us. | RET 2 – 18<br><br>N/A | RET 3 – 18<br><br>Our selectors and buyers interact with our supplier's supplier often. |
| 19 What are the benefits that accrue to: (i) your company, and | RET 1 – 19<br><br>(i) SUP 1 supplies us with the best zipper quality that has very few problems. As a result, we reduce RTMs that could be caused by zippers not functioning well. The lower the RTMs, the lower the cost of processing them. Thus we achieve cost savings through a strong focus on quality.<br><br>(ii) As a result of the standards that we set with SUP 1, if we import a garment that does not have a SUP 1 zipper, its zipper has to be of the same | RET 2 – 19<br><br>N/A | RET 3 – 19<br><br>(i) We get the right packaging for our products. Packaging is a very important part of a product and therefore it has to be right in terms of size, colour, user-friendliness (in the microwave or oven) and how it presents our product.<br><br>(ii) We also benefit from good quality packaging at competitive prices. This means that our products can compete favourably against competition. |

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# APPENDIX G

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| | standard as that supplied by SUP 1. As such the zippers have to be tested by Intertek Testing Services (ITS). Thus due to our close working relationship with SUP 1, we have managed to set a standard for zippers that matches any other international standards.<br><br>(iii) Also, we work closely with SUP 1 to make sure that even if an imported garment's zipper has the SUP 1 inscription on it, SUP 1 checks the zipper to make sure that it is not a counterfeit. This way we make sure that we use the genuine zippers that do not give us problems, such as RTMs. This results in us being able to avoid the cost of poor quality. | N/A | |
| (ii) your supplier's supplier, from the interaction that you have? | (iv) The company is assured of our business. As our business grows, their business with us grows as well. | | (iii) We give them more business, which increases their profitability.<br><br>(iv) Also, because we work together to design packaging for our products, they benefit from our expertise. |
| **General Strategic Cost Management Issues** | | | |
| 20 Are there other issues regarding strategic cost management within your company and in your relationship with your key supplier (manufacturer)you're your supplier's supplier (Tier 1) that you would like to discuss? | RET 1 – 20<br><br>None | RET 2 – 20<br><br>None | RET 3 – 20<br><br>None. |

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