

**THE BENEFITS OF UPSTREAM AND DOWNSTREAM
INTEGRATION OF SUPPLY CHAIN: A CASE OF EAST AFRICAN
BREWERIES LTD (EABL)**

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DECLARATION

This project is my original work and has not been submitted for a degree in this or any other University.

Signed.......... Date.....19/11/2007.....
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This project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

To mum and dad, the fountain of inspiration for their love, patience and care

ACKNOWLEDGEMENT

My special gratitude goes to my supervisor, Mr. Nyamwange for the invaluable advice and guidance from the project proposal through to the final write up of this project.

Special thanks go to Ronald, the Head of Supply Chain & Logistics at EABL and the respondents of the questionnaires for their willingness and patience to answer the questions in time

I highly appreciate the efforts of my parents whose inspirations and support through my schooling brought me to runnage around for academic accomplishment.

My appreciations go to my classmates and friends for their support in one way or the other towards successful completion of this project.

Finally I thank the Almighty God for bringing me this far, without His guidance and support all is void and emptiness

ABSTRACT

In today's constantly changing business environment, organizations cannot battle entirely as individual entities. Increasingly, they must rely on effective supply chain management (SCM) to successfully compete in the global market and networked economies. A firm positioned in a supply chain network must manage interactions in both upstream and downstream segments of this network. The firm's upstream network includes its suppliers and all of the suppliers' upstream partners, whereas the downstream network comprises the firm's customers as well as all of the customers' downstream stakeholders.

The objectives of the study were: to establish the benefits that East African Breweries Ltd (EABL) has achieved as a result of the upstream and downstream integration of supply chain; to establish the challenges faced by EABL as a result of upstream and downstream integration of supply chain and to establish the strategies employed by EABL in risk management as a result of upstream and downstream integration of supply chain.

The research findings revealed that EABL indeed has achieved numerous benefits as a result of successful integration of supply chain. It was also evident that the firm does face some challenges in the whole process of SCM and has put in place some strategies to manage the risks as a result of upstream and downstream integration of supply chain with its strategic partners. The research recommends that internal integration of all functions within the firm to be customer driven even before integrating the upstream and downstream of the supply chain as it will be vital to first create a good link within the firm's function before moving a head to link the firm with other stakeholders within the supply chains and ensure that the benefits can be identified and communicated to all stakeholders in the supply chains.

LIST OF ABBREVIATIONS

CGL	Central Glass Ltd
CRM	Customer Relationship Management
EABL	East African Breweries Limited
EAML	East Africa Malting Ltd
ERP	Enterprise Resource Planning Systems
FMCG	Fast Moving Consumer Goods
IT	Information Technology
JIT	Just-in-time
KBL	Kenya Breweries Ltd
KWAL	Kenya Wine Agencies Ltd
NMP	Nokia Mobile Phones
SCM	Supply Chain Management
SMEs	Small and Medium Enterprises
TPS	Toyota Production System
UBL	Uganda Breweries Ltd

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CHAPTER ONE: INTRODUCTION

1.1 Background

The flow of materials and information through a business from the purchasing activity, through the operations and out to customers, by way of distribution or service delivery activity can be described as immediate supply chain. There are often strategic benefits to be gained in managing the flow between customers and supplier. Inter-company operations management of this nature is now commonly referred as Supply Chain Management (SCM).

In light of the new business opportunities arising from information technologies, several traditional industry value chains are rapidly moving toward supply chain networks (Caputo et al., 2004; Nagurney et al., 2005). A supply chain network incorporates all of the value-adding stakeholders involved in activities such as the development, production and commercialization of a product or service (Hakansson and Snehota, 1989; Nagurney et al., 2005).

A firm positioned in a supply chain network must manage interactions in both upstream and downstream segments of this network (Andersen and Christensen, 2005). The firm's upstream network includes its suppliers and all of the suppliers' upstream partners, whereas the downstream network comprises the firm's customers as well as all of the customers' downstream stakeholders (Andersen and Christensen, 2005). For example, Nokia Mobile Phones (NMP) collaborates closely with its upstream supply partners such as Perlos (case supplier) and Elcoteq (contract manufacturer) to develop and manufacture its new product line while it interacts with its downstream partners like Sonera (network operator) to obtain customer input and seize new market opportunities. NMP has put forward several Information Technology (IT) initiatives to encourage close collaboration and intensive information exchange between its upstream and downstream partners, thus creating a flexible and efficient supply chain network. NMP is now ranked as having the second-best supply network in the world, after Dell Computer (O'Marah, 2004).

SCM involves managing complex flow of information, materials, and money across multiple functional areas both within and among companies. The aim is to achieve goals related to total system performance rather than optimization of a single phase in a supply chain (Heilo and Szekeley, 2005). Typically the goals for SCM are to develop value-added processes that deliver innovative, high-quality, low-cost products on time with shorter development cycles and greater responsiveness (Fawcett and Magnan, 2004). This necessitates companies to identify, evaluate, rank, and manage its supply chain risks. Company's obsession with speed and costs also causes supply chains to break down particularly during the launch of new products (Lee, 2004). According to Speckman and Davis (2004) as supply chains takes advantage of core competences of partnering firms it should also be prepared to manage the risks that may emanate because of partnering firms practices related to environment and ethics. SCM is concerned with managing flow of materials and information between the operations which form the strands or chains of a supply network (Douglas et al, 2000).

Vachon and Wassen (2006) in the study of "Extending green practices across the supply chain: The impact of upstream and downstream integration", argues that technological integration with primary suppliers and major customers was positively linked to environment monitoring and collaboration. Mwanyota (2004) in the study of "Integrating supply chain management and Enterprise Resource Planning Systems (ERP): A survey of supermarkets in Kenya", argues that supply chain integration can encourage information sharing, collaboration and cooperation among supply chain partners.

The strategic benefits of upstream and downstream integration of supply chain include but not limited to: more efficient management of inventory, better focus on the companies competitive priorities thus offering competitive advantage over competitors, encourage information sharing, collaboration and cooperation among supply chain partners, results in improved customer service due to its customer based approach, results to reduction in operating costs and focused approach thus increased profitability for the organization, results to formation of strategic business alliances and encourage, the adoptive of current process technologies in managing business operations. However,

supply chain integration is faced by the following challenges: it requires strong commitment and involvement by top management, supply chain risk management, need to react to dynamic market changes and developing, nurturing and maintaining strategic partnerships (Mwanyota, 2004).

1.1.2 Supply Chain Integration

The increased complexity of products and hence the higher level of outsourcing have moved the level of competition from single companies to groups or chains of firms (Gomes-Casseres, 1994; Rice and Hoppe, 2001). For this reason, literature widely acknowledges the strategic relevance of supply chain management as a source of competitive advantage (Christopher, 1992; Line, 1998). This can be achieved by considering the network as a whole, and hence pursuing global instead of local optimization (Ellram, 1991; Cooper and Ellram, 1993; Simchi-Levi et al., 2000). This can be attained by integrating all the key business processes from end-users to original suppliers (Cooper et al., 1997; Burgess, 1998). Supply chain integration is strictly related to coordination mechanisms and in particular implies that business processes should be streamlined and interconnected both within and outside the company boundaries (Romano, 2003). In particular, those companies that rely heavily on external sources for their strategic activities, as a consequence of focusing on their core abilities, need to be closely integrated with their suppliers (Stevens, 1989).

Supply chain integration has been approached in the literature from different perspectives. For example, Narasimhan and Das (2001) distinguish between customer integration, information integration, logistics and distribution integration and supplier integration. Differences have been also highlighted on the basis of the type of process involved: for example, De Toni and Nassimbeni (1999) classify supply chain integration mechanisms into design links, quality links and logistic links. Romano (2003), in his review, identifies four streams of literature, focusing on functional integration, logistic integration, information integration and process integration.

According to Bagchi et al (2005), European firms are starting to be aware of the strategic importance of integration across the boundaries of the supply chain and found that there is significant negative correlation between the length of relationship with suppliers and performance measures such as total logistics costs, on-time delivery and rate of return. While performance has been shown to have improved as a result of collaboration with suppliers and customers alike in areas such as supply chain design, inventory management and Customer Relationship Management (CRM), the nature and extent of integration has been rather selective.

1.1.3 East African Breweries Ltd (EABL)

EABL is East Africa's leading branded alcohol beverage business and has an outstanding collection of beer and spirits brands. It supports industries and a distribution network across the region. The group's diversity is an important factor in delivering the highest quality brands to East African consumers and long-term value to East African investors. EABL is the holding company of five subsidiaries: Kenya Breweries Ltd (KBL) which is a bottling plant and barley processing company, East Africa Malting Ltd (EAML), a barley and malt production company, Central Glass Ltd (CGL), a glass and bottle manufacturing company, Uganda Breweries Ltd (UBL) and U.D.V. Ltd, which distills and produces a range of the finest quality spirit brands for the local and export markets.

EABL has an annual turnover of Kshs 30 Billion, being one of the most profitable firms in Kenya and it has the largest share of the beer industry in the region. The group employs more than 1000 people across East Africa. EABL has been awarded the accolade of the "Most Respected Company in East Africa", five years in a row (2000, 2001, 2002, 2003 & 2004) in a survey conducted by PricewaterhouseCoopers and the Nation Media Group (www.eabl.com).

EABL faces stiff competition from imported beer and spirits, Kenya Wine Agencies Ltd (KWAL), Kericho industries and the local illicit brews among others. It's through its

tight relationship with the barley farmers that it was able to have a better competitive advantage over Castle Breweries of South Africa, forcing it to exit out of the Kenyan market. This was through its proper upstream integration of supply chain with its suppliers (barley farmers).

1.2 Statement of the Problem

Firms have to realign their operations to environmental changes in order to enable them compete effectively. SCM has become one of the firms' most pressing strategic concerns as manufacturing evolves from vertical to virtual integration (Brandt, 1999). SCM has been widely practiced and documented in Asia, America and Europe, registering great successes as a source of competitive advantages to many world famous organizations (Onwubolu, et al, 1999).

Akkermans et al. (2003) in a survey of European firms found the following as the key issues for the integration of supply chain: (1) further integration of activities between suppliers and customers across the entire supply chain; (2) on-going changes in supply chain needs and required flexibility from IT; (3) more mass customization of products and services leading to increasing assortments while decreasing cycle times and inventories; (4) the locus of the driver's seat of the entire supply and (5) supply chains consisting of several independent enterprises.

However, there is little evidence that would suggest that SCM has gained acceptance among Kenyan firms. The researcher was not aware of any researches that had been done on the benefits of upstream and downstream integration of supply chain. Given that SCM has been successfully been implemented by firms in Asia, America and Europe, it was important to establish and document the benefits of upstream and downstream supply chain integration by Kenyan firms that have successfully implemented supply chain. The research sought to find out whether the benefits enjoyed by EABL are different from the firms in developed countries given the fact that EABL is in a developing country.

1.3 Objectives of the Study

1. To establish the benefits that EABL has achieved as a result of the upstream and downstream integration of supply chain.
2. To establish the challenges faced by EABL as a result of upstream and downstream integration of supply chain.
3. To establish the strategies employed by EABL in risk management as a result of upstream and downstream integration of supply chain

1.4 Importance of the Study

1. To EABL, in identifying the gaps and inconsistencies in the upstream and downstream integration of supply chain towards continuously improving its operations
2. To encourage more Kenyan firms both within and outside the FMCG industry to implement upstream and downstream integration of supply chain since the main reasons for failure will be highlighted in the study.
3. Add knowledge and stimulate further research in other aspects of supply chain particularly in other sectors of the economy. This will be beneficial to firms that have interest in SCM.

CHAPTER TWO: LITERATURE REVIEW

2.1 Supply Chain Management (SCM)

Over the precedent few years, more emphasis has been place on gaining competitive advantage by firms locally and internationally by incorporating supply chain management techniques in their operations. In today's constantly changing business environment, organizations cannot battle entirely as individual entities. Increasingly, they must rely on effective supply chains management to successfully compete in the global market and networked economies. A supply chain is a network that includes vendors of raw materials, plants that transform those materials into useful products, and distribution centers to get those products to customers. It is the sequence which involves producing and delivering of a product or service. (Ian et al., 1999).

SCM involves managing complex flow of information, materials, and money across multiple functional areas both within and among companies. The aim is to achieve goals related to total system performance rather than optimization of a single phase in a supply chain (Helo and Szekely, 2005).

2.2 Types of Supply Chain

2.2.1 Traditional Supply Chain

The traditional supply chain is defined as an integrated manufacturing process wherein raw materials are manufactured into final products and then delivered to customers (via distribution, retail, or both). Its design, modeling, and analysis had primarily focused on optimizing the procurement of raw materials from suppliers and the distribution of products to customers (Beamon, 1999). Traditional supply chain strives to achieve the lowest initial purchase prices while assuring supply. Its typical characteristics are: multiple partners, partner evaluations based on purchase price, cost-based information bases, arms-length negotiations, formal short-term contracts and centralized purchasing

(Spekman et al., 1998). All these characteristics lead to forecast inaccuracies and slow response to the changing market scenarios.

2.2.2 Lean Supply Chain

Leanness means developing a value stream to eliminate all waste, including time, and to enable a level schedule. The origins of lean philosophy can be traced to the Toyota Production System (TPS) (Ohno, 1988) and focuses on the elimination of all waste, including time, to enable a level schedule to be established (Naylor et al., 1999; Mason-Jones et al., 2000). According to Karlsson and Ahlstrom (1997) most of the lean principles are applicable to Small and Medium Enterprises (SMEs) and there exists a close synergy between the lean practices and environmental management (Green et al., 1998).

2.2.3 Agile Supply Chain

Emergence of a new business era characterized by continuous and unpredictable changes with a focus on core competence and mass customization has forced companies to find flexible ways to meet customer demand (Duclos et al., 2003). Agility is defined as business-wide capability that embraces organizational structures, Information Systems, logistics processes and, in particular, mindsets (Christopher and Towill, 2000). Agility focuses on maintaining good productivity under pressure of uncertainty (Heilo, 2004). The goal in achieving agility is to establish a seamless supply chain in which all "players" think and act as one (Mason-Jones and Towill, 1999). An agile supply chain had been recognized as a competitive strategy for companies to survive and prosper (Xu et al., 2003).

2.2.4 Leagile Supply Chain

Lately the concept of "leagile" supply chains is proposed by several researchers (Naylor et al., 1999; van-Hoek, 2000; Mason-Jones et al., 2000; Christopher and Towill, 2001). "Leagile" takes the view that a combination of lean and agile approaches be combined at

a decoupling point for optimal SCM. Mason-Jones et al. (2000) argued that agility can be used downstream and leanness upstream from the decoupling point in the supply chain. Thus, leagile enables cost effectiveness of the upstream chain and high service levels in a volatile marketplace in the downstream chain. According to Christopher and Towill (2001) if the whole concept of leagility is properly understood, lean and agile businesses can co-exist, even on the same site and with some limited rotation of personnel.

2.3 Supply Chain Integration

The increased complexity of products and hence the higher level of outsourcing have moved the level of competition from single companies to groups or chains of firms (Gomes-Casseres, 1994; Rice and Hoppe, 2001). For this reason, literature widely acknowledges the strategic relevance of supply chain management as a source of competitive advantage (Christopher, 1992; Line, 1998). This can be achieved by considering the network as a whole, and hence pursuing global instead of local optimization (Ellram, 1991; Cooper and Ellram, 1993; Simchi-Levi et al., 2000). This can be attained by integrating all the key business processes from end-users to original suppliers (Cooper et al., 1997; Burgess, 1998).

Supply chain integration has been approached in the literature from different perspectives. For example, Narasimhan and Das (2001) distinguish between customer integration, information integration, logistics and distribution integration and supplier integration. Differences have been also highlighted on the basis of the type of process involved: for example, (De Toni and Nassimbeni, 1999) classify supply chain integration mechanisms into design links, quality links and logistic links

According to Frohlich and Westbrook (2001), it is important to recognize two distinctive elements of supply chain integration which are forward physical flows and backward information and data flows. Some practices are aimed at integrating the forward physical flows (Saunders, 1997; Trent and Monczka, 1998), while other practices are more

oriented towards the coordination and integration of backward information and data flows from customers to suppliers (Christopher, 1992; Trent and Monczka, 1998). These two ways of integrating supply chain processes are different in nature. The first type of integration requires a closer coupling of the production systems between the customer and the supplier, and even the co-location of plants. As a result, often the integration of physical flows is closely related to purchasing practices such as supply base leveraging and rationalization (Lamming, 1993). The second type of integration mechanism is aimed at leveraging information from the counterpart to improve internal activities and operations management.

2.3.1 Supply Chain Integration Tactics

At the tactical level, the literature suggests that there are two interrelated forms of integration that manufacturers regularly employ. The first type of integration involves coordinating and integrating the forward physical flow of deliveries between suppliers, manufacturers, and customers (Saunders, 1997). Many of these proponents of supply chain integration fall under the banner of Just-in-time (JIT) (Chapman and Carter, 1990; Landry et al., 1997; Girout, 1998; Narasimhan and Jayaram, 1998). Others have pointed out the importance of delivery integration in terms of implementing product postponement and mass customization in the supply chain (Lee, 2002) or for exploiting third-party logistics (Marvick and White, 1998). The supply chain integration tactics usually employed include: partnership commitment, communication and interdependence.

Recent SCM has attempted to increase understanding of the conditions for win-win partnerships, i.e. customer-supplier relationships in which close long-term co-operation simultaneously increases the value produced by the demand chain and decreases the overall cost of the chain. Several researchers have come to the conclusion that companies need to divide their customer-supplier relationships into classes along the continuum from "arms-length" relationships to true partnerships (Lambert et al., 1998). While true strategic partnerships create new value, they are costly to develop, nurture and maintain. Also, they are risky given the specialized investments they require. The number of real

partnerships a company can build and maintain is limited. Therefore, partnership type of relationships cannot be expected to be built with a large number of customers or suppliers and focusing the resources on building the right relationships requires careful planning and decision-making.

Commitment is also a tactic used in supply chain integration, which refers to the willingness of buyers and suppliers to exert effort on behalf of the relationship. Commitment to a relationship is most frequently demonstrated by committing resources to the relationship, which may occur in the form of an organization's time, money, facilities, etc. These types of resources are often referred to as "asset-specific" resources, in that they are directed specifically towards the other party (Dyer et al., 1999). Several other studies have also found a relationship between resource commitment and the joint action or continuity between parties within inter-organizational relationships (Handfield and Bechtel, 2001). These results suggest that successful partnerships result when both buyers and suppliers demonstrate a willingness to commit a variety of assets to a set of future transactions.

Two aspects of communication behavior that address the extent to which the information exchanged is effective in a partnership include information sharing, and the level of information quality and participation (Monczka et al., 1971). Both of these aspects of information sharing (quantity and quality) are required to successfully develop supplier partnerships. Information sharing refers to the extent to which critical and proprietary information is communicated to one's supply chain partner (Mohr and Spekman, 1994). Suppliers and customers can form joint development teams to improve various aspects in the supply chain or suppliers can suggest changes that may lead to quality or cost improvements (Clark and Wheelwright, 1993). Information quality includes such aspects as the accuracy, timeliness, adequacy, and credibility of information exchanged. Information participation refers to the extent to which partners engage jointly in planning and goal setting (Mohr and Spekman, 1994). These information attributes are closely related and critical in enabling members of a partnership to co-ordinate their activities.

Interdependence exists when one actor does not entirely control all of the conditions necessary for achievement of an action or a desired outcome. Resource dependence has been explored in empirical studies, which investigate the relationship between dependence and control in buyer-supplier relationships (Handfield and Nichols, 1999). For instance, dealers are less opportunistic when they depend on a primary supplier, whereas suppliers with control over dealer's decisions exhibit greater opportunism (Provan and Skinner, 1989). Resource dependence can also influence supplier JIT delivery performance (Handfield and Nichols, 1999).

2.3.2 Supply Chain Integration and Performance Dimensions

Effective supply chain integration on performance dimension depends on independent and dependent variables as described as follows:

2.3.2.1 Independent Variables: Supply Chain Integration

Effective integration of suppliers into supply chains serves as a key factor for some companies to gain competitive advantage (Bowersox and Closs, 1996). The independent variables in supply chain integration are information sharing, internal integration, external integration with suppliers and external integration with customers.

Information sharing refers to exchange of information among company, customers and suppliers. Lee (2002) stated that information should be interoperable, which means that one system can talk to another. Information links between internal primary data repositories and business applications and those of partners allow faster demand forecasting and planning. The technological wave of internet and e-commerce provides a new opportunity to create a "smart" integrated supply chain. Premkumar (2002).

Information exchange with suppliers is very important. How much information is shared affects the company-supplier bond. Formation of an informal information network helps in company-customer information sharing, which directly strengthens the bond between them (Narasimhan and Kim, 2002)

Narasimhan and Kim (2002), view a system-wide integrated network as an essential determinant of supply chain performance. Traditional managers are concerned about the functions of their own departments (Premkumar, 2002). Each function is bureaucratic in nature, but this concept is not advisable a successful supply chain. Cross-functional behavior and internal functions are relevant

External integration with suppliers refers to company working closely with suppliers and viewing the latter as an important component of supply chain and also establishing different levels of strategic partnership with suppliers. The level of strategic partnership or alliances refers to the degree of partnership the company formally or informally forms with suppliers (Narasimhan and Kim, 2002)

External integration with customers refers to company working closely with customers and viewing the latter as an important component of supply chain. It also involves the company doing follow-up with customers for feedback. This refers to the degree of correspondence between company and customers, whereby customers respond to the company regarding the output delivered or to be delivered to customers (Narasimhan and Kim, 2002).

2.3.2.2 Dependent Variables: Supply Chain Integration

Performance of manufacturing companies can be evaluated by a number of key competitive priorities (Krajewski and Ritzman, 2002). Three major categories of dependent variables in supply chain integration are quality, delivery and flexibility.

Quality has always been one of the most important performance criteria in purchasing (Chapman and Carter, 1990; Freeman and Cavinato, 1990; Willis, 1998; Burt et al., 2003; Ballou, 2004; Vollmann et al., 2005; Heizer and Render, 2005). According to Harland (1996), the three factors used as determinants in choosing suppliers in order to improve quality performance are supplier's ability to meet quality standards, ability to deliver products on time and performance history.

According to Coyle et al. (2003), the delivery dimensions are delivery speed, production lead-time and delivery reliability. Delivery speed is how fast orders are processed and goods are delivered to customers. Coyle et al. (2003) defines the same dimension as the ability to reduce the time between order receipt and customer delivery to as close to zero as possible. This dimension also integrates production lead-time, which refers to the time between ordering a good, or service and receiving it (Handfield and Nichols, 1999). This will give customers realistic estimates of how long it will take to fill their orders

Delivery reliability is delivering desired quality as promised without any delays and compromised quality. According Chopra and Meindl (2004), delivery reliability is the ability to meet quoted delivery dates and quantities on consistent basis. This can be achieved by elevating customer relationship which would mean advancing through levels of customer service to customer satisfaction, to customer success (the three S's). One more dimension added is customer feedback. Supply chain is part of total product offering that must assure value for final customers (Ballou, 2004).

Flexibility dimensions can be defined as customer service flexibility which is the ability to accommodate special customer service requests, order flexibility which is the ability to modify order size, volume or composition during logistics operation, location flexibility which is the ability to service customers from alternative warehouse locations and delivery time flexibility which is the ability to accommodate delivery times for specific customers (Chopra and Meindl, (2004).

2.4 Operational Performance Impact of Supply Chain

The SCM literature reports a number of studies on the operational performance benefits that a firm derives from linking with suppliers and with customers. Armistead and Mapes (1993), for example, found that information exchanges among supply-chain entities lead to improved quality consistency, delivery lead time, ability to change volume quickly, and price. Berry et al. (1994) showed that practices underlying supply chain integration (e.g. electronic data interchange) dampens demand amplification effects along the supply

chain, consequently reducing inventory-carrying costs and improving delivery performances.

Supplier involvement in product design has a positive impact on defect rate in the later manufacturing stage. Carter and Ellram (1994), Kalwani and Narayandas (1995) reported that when a firm engages in a long-term relationship with its customers, the firm can reduce demand uncertainty, improve its servicing of customer needs, and lower inventory holding and monitoring costs. According to Forza (1996), supply chain interactions improve plant performances along a number of competitive dimensions. Narasimhan and Jayaram (1998) similarly demonstrated that by managing suppliers strategically, a firm could improve its operational performance, in terms of dependability, flexibility, cost, and quality.

Furthermore, in Groves and Valsamakis (1998), the strength of the partnership between a supplier and a buyer explained significant differences in the timeliness of delivery both from suppliers to the firm and from the firm to its customers. Most recently, Salvador et al (2001) reported that when firms interact with suppliers and with customers on issues related to materials flow and quality, firms can expect better time-related operational performances in terms of speed and delivery punctuality.

2.5 Benefits of SCM

SCM fosters a spirit of shared ownership of the problems and solutions; strong commitment and involvement by top management; consistent goals and objectives communicated to all levels and functions and across organizations in the supply chain, so that all programs are in consonance; and effective use of recognition and rewards. This acts as a motivating factor for employees in the organizations that constitute the supply chain (Zheng et al, 2000).

SCM leads to increased efficiency in transactions between supply chain partners due to enhanced information sharing, collaboration and cooperation. IT has played a big role in

facilitating improvements in SCM (Fischer, 1997). Inter-firm relations generate and share knowledge that ultimately benefits the firm. For example, Lorenzoni and Lipparini (1999) proposed that by developing trust-based relationships with suppliers, a firm is able to continually tap into the suppliers' knowledge stock to its benefit and to the benefit of the entire supply chain.

SCM focuses the organization on competitive priorities that result in creating a competitive advantage over the organizations competitors (Chase et al., 2001). Narasimhan and Jayaram (1998) similarly demonstrated that by managing suppliers strategically, a firm could improve its operational performance, in terms of dependability, flexibility, cost, and quality. Furthermore, in Groves and Valsamakis (1998), the strength of the partnership between a supplier and a buyer explained significant differences in the timeliness of delivery both from suppliers to the firm and from the firm to its customers. Most recently, Salvador et al. (2001) reported that when firms interact with suppliers and with customers on issues related to materials flow and quality, firms can expect better time-related operational performances in terms of speed and delivery punctuality.

SCM leads to more efficient management of inventory where the emphasis is zero tolerance to inventory. Efficient management of inventory results in decreased inventory costs, a saving for the organizations in the supply chain (Krajewski & Ritzman, 1999). Armistead and Mapes (1993), for example, found that information exchanges among supply-chain entities lead to improved quality consistency, delivery lead time, ability to change volume quickly, and price. Berry et al. (1994) showed that practices underlying supply chain integration (e.g. electronic data interchange) dampens demand amplification effects along the supply chain, consequently reducing inventory-carrying costs and improving delivery performances.

SCM leads to reduction in costs as a result of strategic business alliances among the members of the supply chain. Reduced costs results to increased profitability for the organization (Zheng et al. 2000). A case study by Carter and Ellram (1994) found that

supplier involvement in product design has a positive impact on defect rate in the later manufacturing stage. When a firm engages in a long-term relationship with its customers, the firm can reduce demand uncertainty, improve its servicing of customer needs, and lower inventory holding and monitoring costs (Kalwani and Narayandas, 1995).

SCM encourages the organization to adopt current information, process and product technologies in enhancing the organizations performance. This ensures that the organization is not rendered technologically obsolete in its business operations (Krajewski & Ritzman, 1999). This give the organization a competitive edge over its competitors in the market since it's able to keep pace with the ever changing process and product technologies. With efficient and effective performance, an organization is able to keep operate at lowest cost possible which may lead to increased profitability

SCM leads to increased internal business operations efficiency as a result of promoting inter-departmental cooperation and collaboration towards achieving common organizational objectives (Fischer, 1997). A system-wide integrated network is an essential determinant of supply chain performance. Cross-functional behavior is relevant. So, internal functions should be integrated (Narasimhan and Kim, 2002).

Improved customer services because of its customer-based and customer focused approach. SCM focuses the organizations total capabilities towards satisfying its customers better than its competitors (Fischer, 1997) This involves the organization working closely with its customers and viewing the latter as an important component of supply chain. It also involves the company doing follow-up with customers for feedback. It also involves the degree of correspondence between company and customers, whereby customers respond to the company regarding the output delivered or to be delivered to customers (Narasimhan and Kim, 2002).

SCM as one of the best practices enhances the chances of the organization to attain world-class performance status. This is because it spurs the organization to aim for constant and continuous improvement on a global scale (Chase et al., 2001).

SCM also spurs the organization to rapidly adapt to changes in the external environment thereby fostering a fluid and flexible organization, an essential characteristic for survival and growth in today's ever changing business environment (Zheng et al, 2000; Fischer, 1997).

2.6 Supply Chain Risk Management

Typically the goals for SCM are to develop value-added processes that deliver innovative, high-quality, low-cost products on time with shorter development cycles and greater responsiveness (Lawcett and Magnan, 2004). This necessitates companies to identify, evaluate, rank, and manage its supply chain risks. Company's obsession with speed and costs also causes supply chains to break down particularly during the launch of new products (Lee, 2004).

According to Speckman and Davis (2004) as supply chains takes advantage of core competences of partnering firms it should also be prepared to manage the risks that may emanate because of partnering firms practices related to environment and ethics. Successful companies would be those that can identify and develop contingency plans for various risks that exist internally and externally to the organization (Zolkos, 2003). Although at the strategic level supply chain risk management is relatively new and rapidly expanding discipline (Gunasekaran et al., 2004), an appropriate and effective organizational strategy is an imperative to mitigate supply chain risks (Finch, 2004).

The sources of supply chain risks are many, as different links of a supply chain are exposed to different types of risks. Supply chain risks even include risks of sharing sensitive information such as inventory levels and production schedules with other channel members (Rahman, 2004). Dependence on outsourcing, tendency to accept short-term profits (Chandra and Kumar, 2000), pursuit to become more agile and lean adds to the overall risk susceptibility. Generally organizations plan to protect against recurrent, low-impact risks in their supply chains but ignore high-impact, low-likelihood risks (Chopra and Sodhi, 2004).

The supply chain is exposed to market risks like seasonality, volatility of fads, new product adoptions, and short product life (Johnson, 2001). All these predictable and unpredictable risks have made organizations to rethink their risk management strategies in context of supply chains serving across nations and continents.

Supply chain risk management is to collaborate with partners in a supply chain, apply risk management process tools to deal with risks and uncertainties caused by, or impacting on, logistics related activities or resources (Norrman and Jansson, 2004). Though a firm has limited control over the events that disrupt a supply chain, but it can control how well a supply chain copes with those disruptions (Swaminathan, 2003). Supply chain risk management is important because:

- Focus on core competencies has increased the companies' dependence on outsourcing (for both products and services).
- ICI revolution has eliminated the geographical boundaries for developing supply chain partnerships.
- Disruptions in supply chains due to natural calamities and terrorist attacks have more far reaching impacts. This is because of highly integrated nature of today's supply chains.
- Overemphasis on reduction of supplier base or even opting for single sourcing.

Traditionally, the easiest way of managing supply chain risk has been through inventory, but shorter product life cycles and fast changing customer needs have made this option very risky in itself. Risk management in a supply chain also requires certain tradeoffs, e.g. dependence on single supplier may be risky but the risks to intellectual property when working with single supplier are far less. As discussed risks cannot be completely eliminated from supply chains but strategies can be developed to manage these risks if the dynamics between the variables related to risks in a supply chain are understood. Some of the variables that would help alleviate risks in a supply chain are shown below.

2.6.1 Information Sharing

Information sharing is vital for supply chains as lack of information lead to panic, chaotic behavior and unnecessary costs (Childerhouse et al., 2003). Contemporary models for SCM agree that the sharing of business information is a crucial element, which binds supply chains together from end-to-end (Zhenxin et al., 2001; Yu et al., 2001). Free exchanges of information which starts with the product development stage and continue with the mature and end-of-life phases of the product life cycle has been found to be highly effective in reducing the risks associated with inventories, obsolescence and supplier failure (Lee et al., 1997; Lee, 2002). Advent of internet and e-commerce had provided opportunities to all the participants of a supply chain to transfer the information in real time with least transaction cost and global reach (Zeng and Pathak, 2003) resulting in substantial reduction in coordination and distribution costs (Koh and Nam, 2005).

2.6.2 Collaborative Relationships and Trust

In collaborative arrangements management devotes considerable energy in negotiating equitable arrangements for sharing the burdens and rewards of supply chain improvements (Lockamy and Smith, 2000). So to manage risks successfully in a supply chain, organizations are moving to embrace closer relationships with key suppliers (Giunipero and Eltantawy, 2004) which requires deep reorganization of relationships with partners embedded in the network (Caputo et al., 2004). Today there is an increased emphasis on electronic collaboration facilitated by internet technology which has enhanced cooperation and sharing of resources as well as added value to products and improved partners' profitability (Peng et al., 2005; Cheng et al., 2006).

Collaborative relationships require trust and commitment for long-term cooperation along with a willingness to share risks (Sahay and Maini, 2002). Degree of trust among supply chain partners enhances commitment (Mistry, 2005), while lack of trust is cited as one of the major factors that contribute to supply chain risks (Sinha et al., 2004). To consciously reduce mistrust in existing relationships, supply chain managers must continually draw

attention to the benefits, which arise due to a certain degree of trust between both parties (Sahay, 2003). Trust is developed through consistent and predictable acts of the partner over an extended period (So and Sculli, 2002) and has an important role to fulfill in the well-functioning of lean, responsive, and agile supply chains (Svensson, 2001).

2.6.3 Aligning Incentives and Proper Revenue Sharing Arrangements

Generally the goal of every firm is to maximize its own interests, but companies assume, wrongly, that when they do so, they also maximize the supply chains' interests. According to Mentzer et al. (2001) a key component for SCM is sharing both risks and rewards among the members of the supply chain. A supply chain works well if the incentives of its member companies are aligned which requires that the risks, costs, and rewards of doing business are distributed fairly across the network (Narayanan and Raman, 2004). Revenue sharing is a kind of supply chain contract that makes possible to share the risks among supply chain partners (Isay, 1999).

2.6.4 Knowledge about Risks and Risk Analysis

Hallikas et al. (2004) suggested that improved understanding about risks in a supply chain helps to make better decisions and decreases the risks of both a single organization and the whole network. There are many different forms of supply chain risks which can be classified according to how their realization impacts on a business and its environment (Harland et al., 2003). According to Morgan (2004) risk in a supply chain can be sorted in four general categories namely political, economic, terrorism related and "other." By understanding the variety and interconnectedness of supply-chain risks, managers can tailor balanced, effective risk-reduction strategies for their companies (Chopra and Sodhi, 2004).

Risk analysis is a practice with methods and tools for identifying risks in a process (Sinha et al., 2004). It provides a disciplined environment for proactive decision making to

assess continuously what could go wrong, determine which risks are important to deal with, and implement strategies to deal with those risks (Shtub et al., 1994). To assess supply chain risk exposures, the company must identify not only direct risks to its operations, but also the potential causes or sources of those risks at every significant link along the supply chain (Norman and Jansson, 2004).

2.7 Challenges of SCM

The challenges or costs associated with upstream and downstream integration of supply chain include.

SCM requires strong commitment and involvement by top management. The holistic concept of "seamless, end to end" supply management – as distinct from a series of units or functions engaging in sub-optimal behaviour – is clearly laudable. However, it implies some considerable effort to reach through the supply chain: upstream beyond the first tier suppliers, and downstream beyond a focal firm's customers – the so-called "area of integration" (Frohlich and Westbrook, 2001). Alternatively, it would require an unusual degree of co-ordination between tiers. Rarely asked by the proponents of such "integrated" supply chains is who precisely is meant to be doing this "managing" of the whole process. If there is lack of strong commitment and involvement by management then the chance of the success of integrating supply chain becomes minimal.

Supply chain risk management The sources of supply chain risks are many, as different links of a supply chain are exposed to different types of risks. Supply chain risks even include risks of sharing sensitive information such as inventory levels and production schedules with other channel members (Rahman, 2004). Dependence on outsourcing, tendency to accept short-term profits (Chandra and Kumar, 2000), pursuit to become more agile and lean adds to the overall risk susceptibility. Generally organizations plan to protect against recurrent, low-impact risks in their supply chains but ignore high-impact, low-likelihood risks (Chopra and Sodhi, 2004).

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The trend towards fragmentation and variety in product and service offerings necessitates greater thought and skill in managing decoupling points and postponement of final product composition. Hence, the drivers impelling attention to crucial issues of alignment are certainly present but this does not mean that the task is given to supply chain specialists. This indeed appears to be the source of much confusion; simply because there is an apparent need for someone to take a helicopter view of the whole terrain does not mean that this happens in practice. There are undoubtedly issues of professional status and standing intruding here. In most firms the supply chain function (in whatever guise it happens to adopt) rarely has the political standing to allow it take command of these critical strategic issues.

Globalization necessitates greater attention to logistics and to other component elements of supply chain management. There are wider forces at play – outsourcing, global sourcing, volatile customer demand, heightened competition, shorter product life cycles, and customization. Then there is the shift to virtuality – leased merge centres, contract manufacturers, innovators who market a concept and have others make it and so on. The idea that “supply chain management” is a mode of intervention or a self contained activity which is effectively grappling with these forces is an exaggeration. This is not where a neatly managed activity is underway

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CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design

This research was a case study aimed at accessing the benefits of upstream and downstream integration of supply chain at EABL. According to Kothari (2004), a case study involves a careful and complete examination of a social unit, institution, firm, cultural group or an entire community and embraces depth rather than breadth of a study. The case study design was chosen rather than for instance, the cross-sectional survey because the objectives of the study requires an in-dept understanding of the benefits of upstream and downstream integration of supply chain.

3.2 Data Collection

Primary data was the main source of data complemented by interviews. Data was collected by use of questionnaires that were designed having both open and closed ended questions (See Appendix II). The questionnaires were personally administered to the employees working within the EABL's Supply Chain & Logistics department by the researcher using the drop and pick method.

The questionnaire was divided into two parts. Part I contained questions on the general information about the respondent. Part II of the questionnaire collected information regarding the benefits, challenges and risk management strategies of supply chain integration. In particular the following dimensions was investigated: SCM results to formation of strategic to business alliances, reduction in operating costs and increased probability for organization, more efficient management of inventory, fosters on spirit of shared ownership of the problems and solutions among supply chain partners. The questions in part II employed a five scale likert type ranging from "strongly agree" to "strongly disagree".

3.3 Data Analysis

Primary data collected was analyzed using content analysis. Content analysis measures the semantic content or the “what” aspect of a message. This method of data analysis was chosen because the number of questionnaires administered was only five and it could have been difficult to analyze the data using descriptive statistics due to the small number of respondents that the researcher targeted within the EABI’s Supply Chain & Logistics department. The method was also used because it guides against selective perception of the content and has provision for the rigorous application of reliability and validity criteria.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

The objectives of the study were: to establish the benefits that EABL has achieved as a result of the upstream and downstream integration of supply chain; to establish the challenges faced by EABL as a result of upstream and downstream integration of supply chain and to establish the strategies employed by EABL in risk management as a result of upstream and downstream integration of supply chain.

This chapter is divided into seven sub sections which are: the demographic information of respondents; importance of operations strategy in enhancing EABL's competitiveness; different groups creating competitive advantage for EABL.; type of supply chain integration at EABL.; benefits of upstream and downstream integration of supply chain; challenges of upstream and downstream integration of supply chain and supply chain risk management strategies.

The five questionnaires were distributed to the respondents who comprised the management at EABL's Supply Chain & Logistics department. All the five responded by completing the questionnaires and the filled questionnaires were then picked by the researcher.

4.2 Demographic Information of the Respondents

The respondents were requested to indicate how long they have been working for EABL. The respondents had worked for EABL at the Supply Chain & Logistics department for more than two year. This clearly demonstrated that the respondents were well versed with the upstream and downstream integration of supply chain of EABL and this give the researcher confidence in the information provided by the respondents.

4.3 Importance of Operations Strategy In Enhancing EABL's Competitiveness

The respondents were asked whether they consider the operations strategy important in enhancing EABL's competitiveness. It was clear from the responses that operations strategy does play a major role in enhancing competitiveness for EABL. It is out of the proper organized operations strategies that the group is able to have a competitive edge over the stiff competition that it faces from imported beer and spirits, KWAL, Keroche industries and the local illicit brews among others.

Operations strategies of importance to EABL included cost, quality and delivery (speed and reliability), which are the main dependent variables of supply chain integration. Their proper implementation is responsible for the enhancement of EABL's competitiveness as operations strategies can be viewed as part of a planning process that coordinates operational goals with those of the entire organization. The operations capabilities of EABL can be viewed as a portfolio best suited to adapt to the changing product and / or services needs of the firm's customers. This concurs with Krajewski and Ritzman (2002), who argues that the three major categories of dependent variables in supply chain integration are quality, delivery and flexibility.

According to Coyle et al. (2003), the delivery dimensions are delivery speed, production lead time and delivery reliability. Delivery speed is how fast orders are processed and goods are delivered to customers. Coyle et al. (2003) defines the same dimension as the ability to reduce the time between order receipt and customer delivery to as close to zero as possible. This dimension also integrates production lead time, which refers to the time between ordering a good, or service and receiving it (Handfield and Nichols, 1999). This has given the group's customers realistic estimates of how long it will take to fill their orders. It was evident from the responses that EABL had greatly improved on its delivery of beer and spirits to its customers, production lead time and delivery reliability as a result of implementing, evaluating and monitoring proper operations strategies.

4.4 Different Groups Creating Competitive Advantage for EABL.

The researcher requested the respondents to indicate the relative importance of suppliers, suppliers' supplier, customer, customers' customer and employees in creating competitive advantage for EABL. From the responses, the most important groups in creating competitive advantage for EABL were customers and the employees.

It is through proper training of the group's employees on the supply chain management philosophy that the employees are able to efficiently and effectively delivery for the group thus creating the group's competitive advantage. Customer loyalty to EABL's products has also played a significant role in ensuring that the group has a competitive edge over its rivalry. This is enhanced by the proper implementation, evaluation and monitoring of operation strategies that the group have put in place.

EABL does follow-up with its customers as a result of the external integration of supply chain with its customers thus enabling the group to have a competitive edge over its rivalry. According to Narasimhan and Kim (2002), external integration with customers involves the company doing follow-up with customers for feedback. This refers to the degree of correspondence between company and customers, whereby customers respond to the company regarding the output delivered or to be delivered to customers.

4.5 Type of Supply Chain Integration at EABL.

The respondents were requested to state at the type of supply chain integration that EABL has successfully implemented. From the responses, it was clear that the group is beginning to be functionally integrated into a single system or process within the organization which clearly indicated that EABL has implemented leagile supply chain.

"Leagile" takes the view that a combination of lean and agile approaches be combined at a decoupling point for optimal SCM. Mason-Jones et al. (2000), maintains that agility can be used downstream and leanness upstream from the decoupling point in the supply

chain. Thus, agile has enabled FABI's cost effectiveness of the upstream chain and high service levels in Kenyan volatile marketplace in the downstream chain. It's through the proper agile supply chain integration that the group is able to have an aggressive frame over the stiff competition that it faces from imported beer and spirits, KWAL, Kerche industries and the local illicit brews among others.

4.6 Benefits of Upstream and Downstream Integration of Supply Chain

This part presents the core findings of the study and it sought to address the first objective of the study. The researcher had requested the respondents to state their level of agreement in relation to the benefits that their organization has enjoyed as a result of upstream and downstream integration of supply chain.

From the responses it was clear that the following are the benefits that FABI has enjoyed as a result of the upstream and downstream integration of supply chain: SCM offers the group competitive advantage over the competition; SCM has resulted to improved customer service by the group due to its customer focused approach, it encourages the group to aim for constant and continuous improvement on a global scale; it results to more efficient management of inventory. This includes both raw materials and the finished products (beer and spirits, glass); it results to reduction in operating costs and increased profitability for the group and finally it has resulted into strong commitment and involvement of the group's top management

FABI is able to focus on competitive priorities that result in creating a competitive advantage over its competitors. Managing suppliers strategically, the group is able to improve its operational performance, in terms of dependability, flexibility, cost, and quality. This concurs with Narasimhan and Jayaram (1998) who argues that by managing supplies strategically, an organization is able to improve operational performance, in terms of dependability, flexibility, cost, and quality. With proper interactions with its suppliers and customers on issues related to materials flow and quality, the group has

been able to have better time-related operational performances in terms of speed and delivery punctuality.

The successful integration of supply chain has led to improved customer services because of its customer based and customer focused approach. FABI has been able to focus its total capabilities towards satisfying its valuable customer better than its competitors as it is able to closely work with its customers (downstream integration) and viewing the customers as an important component of the entire supply chain. Fischer, (1997) maintains that with proper SCM, an organization is able to focus on its total capabilities towards satisfying its customers better than its competitors

SCM as one of the best practices at FABI has enhanced the chances of the group to attain world-class performance status. It has driven the group to aim for constant and continuous improvement on a global scale and thus being able to produce world class beer and spirits that have a wider market share both locally with the largest share of the beer industry in the East African region and internationally.

The continuous improvement on a global scale has led to the group's diversity as an important factor in delivering the highest quality brands to East African consumers and long-term value to East African investors. Chase et al. (2001) maintains that SCM enhances the chances of an organization to attain world-class performance status. This is because it spurs the organization to aim for constant and continuous improvement on a global scale.

The group is able to efficiently manage inventory where the emphasis is zero tolerance to inventory. Efficient management of inventory has resulted in decreased inventory costs, a saving for the group in the supply chain. Information exchanges among the FABI's supply-chain entities lead to improved quality consistency, delivery lead time, ability to change volume quickly, and price.

Demand amplification effects along the supply chain consequently reduce inventory-carrying costs and improve delivery performances. . Berry et al. (1994) showed that practices underlying supply chain integration (e.g. electronic data interchange) dampens demand amplification effects along the supply chain, consequently reducing inventory-carrying costs and improving delivery performances

SCM has lead to reduction in the group's operating costs as a result of strategic business alliances among the members of the supply chain. Reduced costs and increased sales due to proper operations strategies being implemented results to increased profitability for the group thus placing EABI, as one of the most profitable firms in Kenya.

4.7 Challenges of Upstream and Downstream Integration of Supply Chain

This part sought to address the second objective of the study which was to establish the challenges faced by EABI, as a result of upstream and downstream integration of supply chains. The respondents were requested to state the challenges EABI, faces as a result of upstream and downstream integration of supply chain.

From the responses the biggest challenges that the group faces were suppliers and, organizational structure. Given the fact that the group has a few suppliers who are fully integrated within the group's operations e.g. CGL and EAML, this poses as challenges to the group with the fear of what if the few suppliers are not able to deliver on time, the consequences and impact would be great losses to the group.

The group organizational structures poses to be a great challenge as there is no clear alignment of duties, roles and responsibilities within the Supply Chain & Logistics department to meet the business needs and also poor communication channels. There is a need to realign organizational structures to drive the integration and to enhance communication within the group and its strategic supply chain patterns. This will necessitate more communication both vertically and horizontally, involvement of all

stakeholders in the supply chain integration changes, new systems and new technology associated with supply chain.

4.8 Supply Chain Risk Management Strategies

This part sought to address the third objective of the study which was to establish the strategies employed by FABL in risk management as a result of upstream and downstream integration of supply chain. The respondents were requested to rank the different supply chain risk management strategies that FABL has implemented starting with the mostly used to the least used.

From the responses, the following are the supply chain risk management strategies employed by FABL starting with the mostly used strategy descending to the least used strategy: information sharing with the key supply chain strategic partners; collaborative relationships and trust; knowledge about risks and risk analysis in the supply chain and aligning incentives and proper revenue sharing arrangements

Information sharing is the mostly used strategy by the group since it is vital to share information among the supply chain partners, as lack of information leads to panic, chaotic behavior and unnecessary costs. This was inline with Childerhouse et al. (2003) arguments. Sharing business information is a crucial element which bids supply chains together from end-to-end (Zhenxin et al., 2001; Yu et al., 2001)

Collaborative relationships and trust is also used as a supply chain risk management strategy by group. In collaborative arrangements management devotes considerable energy in negotiating arrangements for sharing the burdens and rewards of supply chain improvement. This necessitates the collaborative relationships and trust that the group has put in place within its supply chains. Giunipero and Ellantawy (2004) maintains that in order to manage risks successfully in a supply chain, organizations are moving to

embrace closer relationships with key suppliers which requires deep reorganization of relationships with partners embedded in the network.

However according to the responses, knowledge about risks and risk analysis in the supply chain and aligning incentives and proper revenue sharing arrangements were not considered as main strategies that are used by the group in supply chain risk management.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

It is apparent from the research findings that all the respondents had good knowledge of the upstream and downstream integration of supply chain. This study revealed that the major benefits of upstream and downstream integration of supply chain are: it offers the group competitive advantage over the competition (Chase et al., 2001), has resulted to improved customer service by the group due to its customer focused approach (Fischer, 1997), encourages the group to aim for constant and continuous improvement on a global scale (Chase et al., 2001), results to more efficient management of inventory (Krajewski & Ritzman, 1999). This includes both raw materials and the finished products (beer and spirits, glass), it results to reduction in operating costs and increased profitability for the group (Zheng et al, 2000) and finally it has resulted into strong commitment and involvement of the group's top management.

The challenges that the group faces as a result of upstream and downstream integration of supply chain are few suppliers being fully integrated to the groups operation thus posing a great risk just incase the few suppliers are not able to deliver on time (Frohlich and Westbrook, 2001) and also the group organizational structures were there no clear alignment of duties, roles and responsibilities within the Supply Chain & Logistics department to meet the business needs and also poor communication channels.

The group has implemented some strategies to manage the risks involved as a result of the integration. The mostly used strategies are information sharing with the key supply chain strategic partners (Childerhouse et al., 2003) and collaborative relationships and trust (Giunipero and Eltantawy, 2004).

5.2 Conclusions

It is evident that the group as a result of successfully integrating supply chain has already started achieving the benefits associated by the upstream and downstream integration. These benefits could not be realized unless employees are well trained on the different aspects of supply chain; top management is committed, proper supply chain risk management strategies are implemented and monitored.

However there is need to ensure that the benefits can be identified and communicated to all stakeholders in the supply chains and adopt a culture of gain sharing among the supply chain partners (Lee, 2002). It was also evident that the firm does face some challenges in the whole process of SCM and has put in place some strategies to manage the risks as a result of upstream and downstream integration of supply chain with its strategic partners.

5.3 Recommendations

For a firm to enjoy the benefits of upstream and downstream integration of supply chain the following need to be done: internal integration of all functions within the firm to be customer driven even before integrating the upstream and downstream of the supply chain as it will be vital to first create a good link within the firm's function before moving a head to link the firm with other stakeholders within the supply chains. ensure that the benefits can be identified and communicated to all stakeholders in the supply chains, adopt a culture of gain sharing, enhance communication both vertically and horizontally with all the stakeholders, induce an environment of openness and trust, rewarding the success to employees, alignment of duties, roles and responsibilities within the Supply Chain & Logistics department to meet the business needs e.g. proper demand planning, supply planning and material planning and finally re-alignment of the firm's structure to drive the supply chain integration

5.4 Limitations of the Study

Although collection of the data was administered using a questionnaire which was dropped and picked, the collection of data should have been complemented with focus group discussions with each and every respondent to generate more exploratory information and increase the accuracy of the findings . The researcher only had focused discussions only with the head of Supply Chain & Logistics who clarified some issues about the integration of supply chain at EABL. This was due to the time constraint limitation.

5.5 Suggestions for Further Research

The current research was a case study approach in identifying the benefits of upstream and downstream integration of supply chain. It is suggested that a similar research can be done on all the FMCG firms in Kenya establish whether the benefits are the same. Also a study can be done to research more in depth on the supply chain risk management strategies. The same research can be replicated after some to find out whether the findings would be the same over a period of time.

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APPENDIX I: INTRODUCTION LETTER

Holbert Gatarwa Njoroge,
School of Business,
C/O MBA Co-ordination Office,
University of Nairobi,
P. O. Box 30197,
NAIROBI.

August 30 2007

Dear Respondent,

RE: COLLECTION OF SURVEY DATA FROM YOUR ORGANIZATION.

I am a postgraduate student at the University of Nairobi, School of Business. As part of the fulfillment of the requirements of the MBA degree, I am undertaking a management research project on "The Benefits of Upstream and Downstream Integration of Supply Chain: A Case of East African Breweries Ltd (EABL)".

You have been selected to form part of this study. This is to kindly request you to assist in data collect by filling out the accompanying questionnaire, which I will collect from you.

The information you provide will be used exclusively for academic purposes. The information you provide will be treated with strict confidentiality. A copy of the final paper will be availed to you upon request. Your co-operation will be highly appreciated.

Thanking you in advance,

Yours faithfully,

HOLBERT NJOROGE
MBA Student
0722 915 236

APPENDIX II: QUESTIONNAIRE

PART I: GENERAL INFORMATION

1. Your Name

.....(Optional)

2. Job Title

.....(Optional)

3. Your Gender : Male [] Female []

4. How long have you been working for FABL. (Please tick one)

- i. Less than 1 year []
- ii. 1-5 years []
- iii. 6-10 years []
- iv. 11-15 years []
- v. 16-20 years []
- vi. More than 20 years []

5. Using the categories below, please indicate the number of staff you oversee in your department. (Please tick one)

- i. Less than 5 []
- ii. Between 5 -10 []
- iii. Between 10-15 []
- iv. More than 15 []

PART II

1. Do you consider the operation strategy important in enhancing your company's competitiveness? (Please tick one)

Yes [] No []

2. What relative importance do you give the following groups of creating competitive advantage for your organization? (Please indicate a value from 1 to 5, where 1 is most important and 5 is least important).

	1	2	3	4	5
Suppliers					
Suppliers' supplier					
Customers					
Customers' customer					
Employees					

3. On a scales of 1 to 5 (where 1 is most important and 5 is least important). In your own opinion, do you believe supply chain management leads to enhanced competitiveness?

1 [] 2 [] 3 [] 4 [] 5 []

4. Where do you place your organization in the following phase of supply chain management (Please tick one).

- i. Entire supply chain management system operating as one extended system with all the reading partners in all aspects []
- ii. Supply chain management fully integrated with all your suppliers and all your customers on main issues []
- iii. Supply chain management system fully integrated internally and connected to a few suppliers and a few customers []

iv. Beginning to be functionally integrated into a single system or process within the organization []

5. Has your organization found it necessary to carry out employee training on the supply chain management philosophy (please tick one)

Yes [] No []

6 If yes to question 5 above, how many employee have been trained for each of the following cadres:

i. Top Management []

ii. Senior Managers []

iii. Clerical []

iv. Others please specify

7 Please indicate the level to which you agree or disagree with the following statements in relation to the benefits that your organization has enjoyed as a result of supply chain integration.

Supply Chain Management (SCM)	Strongly agree	Agree	Neither Agree nor disagree	Disagree	Strongly disagree
Results to formation of strategic to business alliances					
Results to reduction in operating costs and increased profitability for organization					
Results to more efficient management of inventory					
Promotes inter-departmental cooperative and collaboration within your business					

Encourages information sharing, collaboration and cooperation among your supply chain partners.					
Fosters on spirit of shared ownership of the problems and solutions among supply chain partners					
Requires strong commitment and involvement of top management					
Encourage the adoption of current process technologies in managing business operations					
Offers us competitive advantage and priorities over our competitors					
Results to improved customer service due to its customer focused approach					
Encourages the organization to aim for constant and continuous improvement on a global scale					
Encourages the organization to rapidly adopt to changes in the external environment					
SCM benefits are too far in the future.					

8. On a scale of 1 to 5 (where 1 is most important and 5 is least important, please rank the importance of the following strategies that your organization has employed in order to manage the supply chain risks.

Supply chain risk management strategies	1	2	3	4	5
Information sharing					
Collaborative relationships and trust					
Aligning incentives and proper revenue sharing arrangements					
Knowledge about risks and risk analysis in the supply chain					

9. Please indicate the level to which you agree or disagree with the following statements in relation to the major barriers to the upstream and downstream integration of supply chain

	Strongly agree	Agree	Neither Agree nor disagree	Disagree	Strongly disagree
Suppliers					
Customers					
Technology used					
Organization structure					
Financial constraints					
Employees training					

10. What should be done to encourage the upstream and downstream integration of supply chain in your organization?

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11. Please highlight any other supply chain management practices or issues from your company's experiences that can enrich this study

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