SUPPLY CHAIN INTEGRATION PRACTICES AND ORGANIZATIONAL PERFORMANCE OF MULTINATIONAL FIRMS IN KENYA

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DECLARATION

I declare that this research project is my original work and has never been submitted for examination in any other university.

Signature…….. Date…….....……

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D61/79056/2012

This research project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this project to my dear husband and loving mom for their prayers, love and support during my studies. Words alone cannot express my appreciation; I will forever be indebted to you. God bless you! To my sons Rayhan and Adrian I thank the Almighty for the joy you have brought to my life.

A special dedication also goes to my siblings George and Dan and mother in law Nyar Agutu for praying with me and being an encouragement when I needed it. I also dedicate this project to my friends Doreen and Edna and classmates who provided their valuable support and advice during the undertaking of this project. Thank you very much, God bless you!

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As I undertake this research paper, I deeply acknowledge the immense support and guidance I received from my supervisors, Dr. Magutu and Dr. Iraki. Your efforts were worthy the task and I have no better words to express my appreciation. I also wish to acknowledge all my lecturers for their support, encouragement and guidance during my studies at the University of Nairobi

I am grateful to my spouse for his unconditional love, financial, moral support and his encouragement which has enabled me to pursue my studies. I am also thankful to my mom for her prayers, support and guidance and above all to God Almighty for granting me this opportunity in life. Your name will always be lifted high.

ABSTRACT

Successful supply chain management relies on organizations working together and collaborating effectively. As organizations become more specialized and global, it becomes critical for organizations to manage the entire network of supply to optimize overall performance. Supply chain integration practices are considered a powerful weapon to gain competitive advantages and linking performance measurement systems to supply chain integration practices can lead to increased success of supply chain initiatives. Organizations need to integrate their supply chains to secure maximum support for competitiveness in their market. The objective of this study was to determine the supply chain integration practices adopted by the 226 Multinational firms in Kenya. A cross-sectional type of survey was conducted, which was appropriate for the large number of the foreign Multinational firms in the country. A sample of 40 Multinational firms was drawn from the 226 Multinationals through simple random sampling out of which 28 responded. Primary data was collected using structured questionnaires. It was determined that without considering the vendor (supplier) managed inventory practices, collaboration planning, forecasting and replenishment, efficient consumer response practices, customer relationship and management practices and enterprise resource planning practices, performance of the multinationals is constant at 1.794. However by introducing vendor (supplier) managed inventory practices, the firms' performance improves by 0.420, collaboration planning, forecasting and replenishment leads to 0.196 improvement in the multinational performance, efficient consumer response practices leads to 0.195 improvement on performance of the multinationals, customer relationship and management practices leads to 0.016 improvement on performance of multinationals in Kenya, while enterprise resource planning practices leads to 0.049 improvement on performance of the multinationals.

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ABREVIATIONS

ANX	Automotive Network Exchange
APS	Advanced Planning Systems
CPFR	Collaborative Planning, Forecasting, and Replenishment
CRM	Customer Relationship Management
DRP	Distribution Requirements Planning
ECR	Efficient Consumer Response
EDI	Electronic Data Interchange
ERP	Enterprise Resource Planning
IP	Internet Protocol
JITD	Just-in-Time Distribution
VICS	Voluntary Inter-industry Commerce Standards
VMI	Vendor Managed Inventory .

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Today's volatile global business environment is characterized with supply chains that are increasingly longer and more intricate, with more interconnected links, higher stakeholders' expectation, and more sources of supply chain competition (Gunasekaran, Patel, Tirtiroglu, 2001).Successful supply chain management relies on organizations working together and collaborating effectively (Lazzarini et al., 2001). As organizations become more specialized and global, it becomes critical for organizations to manage the entire network of supply to optimize overall performance (Lee, 2000). Functions internal to the organization as well as those external to it should integrate to achieve the desired outcomes. Therefore, as Hill (2000) proposes, organizations need to integrate their supply chains to secure maximum support for competitiveness in their market.

In a global business perspective, companies are actively expanding to seek new opportunities over the world. For this multinationals to remain competitive they have to embrace supply chain integration practices. In a global market, Ragatz et al., (1997) reinforces the point that supply chain integration practices are recognized to be one of today's competitive advantages and is determined by how effectively companies link their operations with their supply chain partners such as suppliers, distributors, wholesalers, retailers and end customers.

Information sharing is an important aspect in achieving seamless integration in a supply chain (lee, 2000). Cross functional integration and inter organization integration require the visibility of information across the supply chain. As a supply chain spans many organizations in delivering products to customers both upstream and downstream and many functional areas within a company, the implementation of information technology allows companies to increase communication and coordination of various value adding activities with their partners and between functions within their own operations (Simchi-Levi et al., 2004).

1.1.1 Supply Chain Integration Practices

According to Leenders and Johnson (2000), recent years have seen growth in the importance of integrating suppliers, manufacturers and customers. Mentzer et al. (2001) define supply chain as a set of three or more entities (organizations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/ or information from a source to a customer. Pagell (2004) defines supply chain integration practices as the process of interaction and collaboration in which companies in a supply chain work together in a cooperative manner to achieve mutually acceptable outcomes.

Supply chain integration practices have been broken into internal and external integration practices (Zailani and Rajagopal, 2005). In practice, integration practices engaged by firms include: Customer Relationship Management (CRM) practices, Vendor Managed Inventory (VMI) practices, Collaborative Planning, Forecasting, and Replenishment

(CPFR) practices, Just-in-Time Distribution (JITD) practices and Efficient Consumer Response (ECR) practices. Similarly, firms that implement Advanced Planning Systems (APS) may integrate production decisions across the supply chain by including supplier inventory and capacity constraints into their scheduling function.

Integration practices of supply chains helps to elevate the linkages within each component of the chain and facilitate better decision making to get all the pieces of the chain to interact in a more efficient way. They can provide competitive advantages: added value, the creation of efficiencies and client satisfaction (Stock, Boyer and Harmon, 2011), which are represented by the reduction in inventories, improvement in service delivery and quality and shorter product development cycles. Integrating supply chains can lead to reductions in cost and cycle time (Power, 2005). Therefore, supply chain integration practices advocates for integrated behaviors, mutually sharing of information, mutually sharing of risks and rewards, cooperation, the same goals and the same focus on serving customers, integration of processes, and building and maintaining long term relationships with supply chain partners.

1.1.2 Organizational Performance

Organizational performance refers to how well an organization achieves its market oriented goals as well as its financial goals (Yamin S. et al., 1999). Organizational performance measurement is a system that provides a formal definition of organization performance model based on mutually agreed upon goals, measures, measurement methods that specify procedures, responsibilities and accountability of the organization's

supply chain participants and the regulation of the measurement systems by its participants (Eccles and Pyburn, 1992), efficiency and effectiveness of the organization.

A company needs to have performance measurements to be able to evaluate the efficiency of the organization operations. According to Sink (1986), you can't manage if you can't measure. Therefore, Performance measurement and metrics have an important role to play in setting objectives, evaluating performance, and determining future courses of actions. According to Beamon (1999), measuring organization performance can facilitate a greater understanding of the organization and improve its overall performance. Linking performance measurement systems to supply chain integration practices can lead to increased success of the organization's supply chain initiatives. Gunasekaran et al. (2005) mention the following as the purposes of a performance measurement system: identifying success, identifying if customer needs are met, better understanding of processes, identifying bottlenecks, waste, problems and improvement opportunities, providing factual decisions, enabling progress, tracking progress and facilitating a more open and transparent communication and co-operation.

Goals and strategies of an organization determine the type of performance metrics a firm should select to measure its performance. The short term objectives of supply chain management are primarily to increase productivity and reduce inventory and cycle time, while long term objectives are to increase market share and profits for all members of the supply chain (Tan, Kannan, Handfield, 1998). Any organization initiative including

supply chain integration practices should ultimately lead to enhanced organization performance.

1.1.3 Multinational Companies in Kenya

Multinational corporations have for a long time played a critical role in international trade and that they are key players in the global economy through their activities in host countries (Ogutu and Samuel, 2011). Multinationals are increasingly conducting their business in a global platform which has increasing complexity due to interconnected processes of globalization and internationalization of businesses. According to (Root, 1994), a multinational company is a parent company that engages in foreign production through its affiliates located in several countries, exercise direct control policies; implement business strategies in production, marketing finance and staffing that transcend national boundaries.

The Kenyan economy, East Africa's largest, has experienced considerable growth in the past few years, driven by several key factors. The country has a reasonably well-educated labor force, a vital port that serves as an entry point for goods destined for countries in the East and Central Africa interior, abundant wildlife and above all, a government that is committed to implementing business reforms. This has created the best ever environment for multinationals to invest in Kenya (Ogutu and Samuel, 2011). Multinational companies may help emerging economies in the modernization of their economies and industries by transferring technology, know-how and skills, by providing access to export markets, by intensifying competition, or by making available goods and services that are

better and/ or cheaper than those offered by local producers (De Mello, 1999; UNCTAD, 1999; JBIC institute, 2000).

Multinationals are alternatively faced with multiple challenges in host countries. The greatest challenge facing multinationals is fierce market competition forces and changing business priorities in the host countries. Other challenges include: government policies, investment motives, entry strategies, absorption capacity of local industry or the extent to which multinationals link up to local firms and industries (Altenburg, 2000).

1.2 Research Problem

Managing supply chain in recent business environment is increasingly challenging. Market globalization, short product life cycle, rapid technology growth, high complexities in logistics and distribution and involved manufacturing process, have led to complexities in managing supply chains.

However, a firm's biggest problem faced lately is greater uncertainties in demand and supply (Kaipia, Holmstrom and Tanskanen, 2002). Supply chain integration practices are considered a powerful weapon to gain competitive advantages (Lambart et al., 1998) and linking performance measurement systems to supply chain integration practices can lead to increased success of supply chain initiatives. Indeed, "it has become clear that an individual firm can no longer prosper in business, but rather, it is the entire network that moves raw materials through production and, ultimately, to end users, which are the nexus of marketplace success" (Lancioni et al. 2003).

Multinationals play a very important role in the country's social economic development. At present the multinationals operate in an industry that is capital intensive and characterized by a strong competition and a very volatile business environment. For the multinationals to remain competitive, they have to continuously improve and adapt new supply chain integration practices. Despite a host of benefits gained from supply chain integration, only a few firms have adopted and successfully implemented the concept of jointly planning, controlling, and designing a supply chain (Lori *et al.*, 2011).

A number of studies have been done on supply chain integration practices and organization performance, Zailani and Rajagopal (2005) conducted a research on supply chain integration and performance of US verses East Asian companies and concluded that coordination and collaboration with suppliers and customers is the key element of supply chain integration practices. Stevens (1989) stated that gaining competitive advantage requires the development of an integrated supply chain.

Frohlich and Westbrook (2001) studied the impact of supplier and customer integration to company's performance. They identified five different integration strategies and found that companies with broader supply chain integration- with suppliers and customers showed the largest performance improvement. Yunus (2013) did an empirical study on supply chain integration in Indonesia and his findings supported previous studies related to the positive relationship between supply chain integration practices and firm performance. Kazi (2012) did a study on supply chain management practices and

performance at Kenya Medical Suppliers Agency and concluded that effective coordination of supply chain management practices are critical in enhancing competitiveness of an organization.

Although literature has contributed a great deal of knowledge to a better understanding of supply chain integration practices and has sought out to explicate performance benefits of the integration concept, there has been little consensus and clarity as to the efficacy of supply chain integration practices in improving firm performance (Fabbe-Costes and Jahre, 2008). Vickery et al. (2003) also found that the relationship between supply chain integration with financial performance was indirect and fully mediated by customer service performance. Therefore, as Fabbe-Costes and Jahre observes and as (Yunus, 2013) recommends there is need for more research to investigate, compare and contrast findings on the relationships between various supply chain integration practices and organizational performance from a different country and a different type of industry. This study therefore sought to add onto the existing knowledge of supply chain integration practices by narrowing the contextual scope to selected multinationals in Kenya.

It is on the basis of these extant gaps that this study therefore sought to find answers to two research questions: What are the supply chain integration practices carried out by multinational firms in Kenya? What is the relationship between supply chain integration practice and organizational performance of multinational firms in Kenya?

1.3 Objectives of the Study

The research project therefore sought to explore and investigate the following:

i. To establish the supply chain integration practices adopted by multinationals in Kenya

ii. To determine the relationship between supply chain integration practices and organization performance of multinational firms in Kenya.

1.4 Significance of the Study

The study findings was expected to be beneficial to various stakeholders as it brings different perspectives of supply chain integration practices as evidenced from a developing nation. The study would comprehensively document the supply chain integration practices and the benefits associated with the practices.

Above all, the study sought to determine the relationship between the supply chain integration practices and supply chain performance of the multinationals. This study would illuminative to not only multinational firm's managers but also to local managers working in turbulent global environments seeking for ways to enhance organization performance by embracing supply chain integration practices.

The study would also create a monogram which could be replicated in other multinational organizations which are facing global and local competition. Most importantly, this research aimed to develop a consensus about current findings and develop an

understanding of the underdeveloped areas and misunderstandings of the supply chain integration practices phenomenon.

Future scholars could use the results of this study as a source of reference as it aimed to deepen knowledge in supply chain integration practices and their impact on supply chain performance.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviewed some of the studies that have been conducted in the area of supply chain integration practices. It sought to find out the supply chain integration practices and to determine the relationship between supply chain integration practices and organization performance. It then summarized the reviewed literature and the conceptualized the study variables.

2.1 Supply Chain Integration Practices

Most supply chain literature considers supply chain integration practices as the collaborative effort in linking functions and supply chain networks in terms of process, information and physical flow (Frolich and Westbrook, 2001). Mentzer et al. (2008) concluded that coordination and collaboration with suppliers and customers is the key element of supply chain integration practices. Therefore, coordination, collaboration, interaction, information flow linkage and business process linkage become the key components of supply chain. Supply chain integration practices refer to the degree to which a manufacturer strategically collaborates with its supply chain partners and collaboratively manages intra- and inter-organization processes (Flynn et al., 1994).

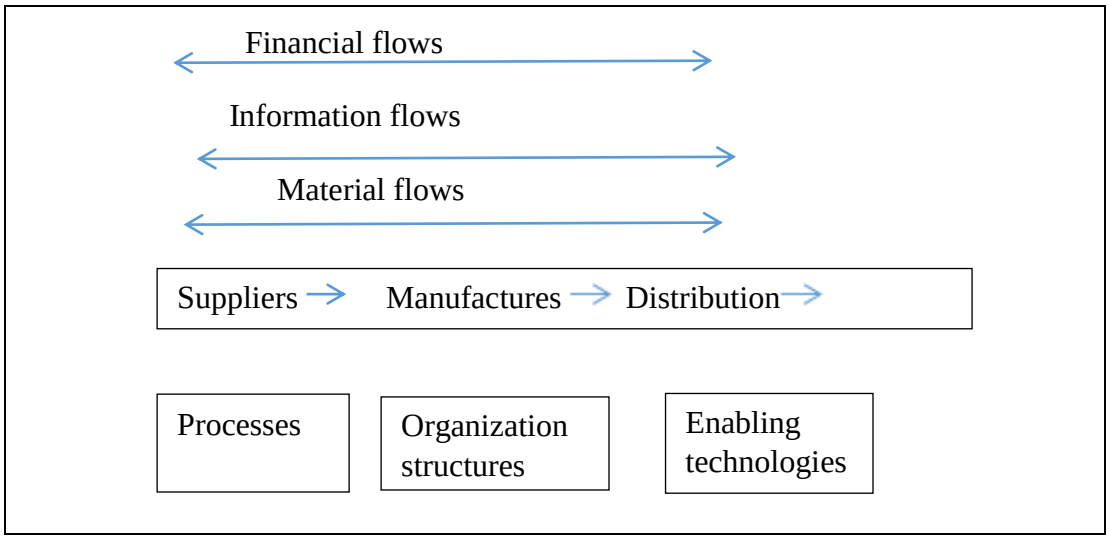

Figure 2.1: An integrated model of the supply chain

Source: Akkermans et al. 2003, p. 286

Swink et al. (2007) argue that the integration process includes activities that require, share, as well as consolidate strategic knowledge and information with parties outside the immediate organization. Rosenzw.eig, Roth, and Dean Jr. (2003) further define supply chain integration practices as the linkages among various supply chain elements. Supply chain integration practices includes the internal linkages among the departments, functions, or business units within the firm that source, make and deliver products and the external linkages with entities outside the enterprise, including the network of direct suppliers and their supplier and direct customers and their customers.

Supply chain integration practices entails a set of three or more entities that are directly involved in the value adding processes required to achieve efficient and effective upstream and downstream flows of products, services, finances, decisions, and / or from source to a customer (Mentzer et al., Zhao et al., 2008). This implies that the performance

of each supply chain practice should be evaluated depending on how the practice has a significant effect on the efficient integration of entire supply chain processes, and thus, the successful achievement of supply chain integration can be possible by the systematic utilization of various supply chain practices.

Bowersox (1989) asserts that the process of supply chain integration should progress from the integration of internal logistics processes to external integration with suppliers and customers. This internal integration can be accomplished by the automation and standardization of each internal logistics function, the introduction of new technology, and continuous performance control under formalized and centralized organizational structure. External integration can be achieved by information sharing and strategic linkage with suppliers and customers, and the standardization of logistics process between firms (Bowersox, 1989).

Supply chain integration practices have been broken into internal and external integration practices (Zailani and Rajagopal, 2005. In recent literature, internal integration practices combines different internal perspectives and refers to the degree to which companies aim for cross functional linkage, develop structures for interaction, and execute cross-functional operations in their everyday business (Schoenherr and Swink, 2012). An organization is considered to have a high level of integration when the information systems used different functions are linked together with all functions able to access accurate and real time information from other functions and there are also effective means of communication across functions (Frohlich and Westbrook).

External integration practices are dyadic and uni-dimensional in that it encompasses either supplier integration or customer integration (Flynn et al., 2010). The practices recognize the importance of establishing close, interactive relationships with customers and suppliers. Integration with suppliers represents a change from adversarial to a cooperative attitude, commencing with product development, the supply of high quality products, the processing and incorporation of changes in specifications, technology exchange and design support. To achieve customer integration, there should be seamless links between the organization and its customers, both parties should be able to access accurate and real time information. There should be seamless links between them in terms of business processes as well as strong supplier- customer relationships (Frohlich and Westbrook, 2001).

Several theories have been put forward in an attempt to offer proactive and helpful wisdom to the field of supply chain integration. For instance, the systems theory emphasizes the interconnected nature of organizational activities (Ashmos and Huber, 1987). The theory helps to understand to what extent and how the supply chain level of analysis help explain organizational behavior and outcomes beyond the explanations offered by other levels of analysis, such as firm, the industry and the nation and also to what extent do well integrated chains represent an organization? Also, what are the performance implications of their development? The supply chain integration practices commonly practiced by organizations include:

2.1.1 Vendor Managed Inventory (VMI) Practices

Vendor managed Inventory (VMI) practices can be defined as means of optimizing supply chain performance in which the supplier has access to the customer's inventory data and is responsible for maintaining inventory level required by the customer (Flavin, 2002). In a VMI partnership, the supplier makes the inventory replenishment decision for the firms. Vendor Managed Inventory is a collaborative process between a supplier/manufacturer and a manufacturer/retailer/distributor, where the manufacturer gains access to the demand and inventory information at the retailer and uses this information to "better" manage the retailer's inventory. VMI started as a pilot program in retail industry between Procter and Gamble and WalMart in 80's and resulted in significant benefits, such as lower inventory levels, fewer stock-outs and increased sales, and has been adopted by many other supply chains such as Dell's, Barilla's or Nestle's.

De Toni and Zamolo (2005) present key characteristics of VMI as short replenishment lead times and frequent and punctual deliveries that optimize production and transport planning. Furthermore, according to them, the middle/long term collaboration allows to proportion supplier's production capacity and to determinate the minimum and maximum customer's inventory level. VMI is an example of how it is possible to improve the efficiency of material flows in a firm and supplier partnership. By keeping the firm's inventory located at firm's site, the supplier then can align his operations with the needs of the firm's requirement in a more transparent manner, they no longer need to guess what will be the actual requirement or demand and will know roughly what product to deliver.

2.1.2 Collaborative Planning, Forecasting, and Replenishment (CPFR) Practices

Collaborative planning, forecasting, and replenishment (CPFR) practices were defined by the Voluntary Inter-industry Commerce Standards (VICS) committee as a way of describing supply chain collaboration. It defined CPFR as a collection of new business practices that leverage the Internet and Electronic Data Interchange (EDI) in order to radically reduce inventories and expenses while improving customer service. Compared with previous strategic alliances, CPFR concentrated on strongly linking business planning, forecasting, and replenishment through deeper information sharing.

In general, CPFR is referred to as a nine-step joint demand planning process that aims to enhance supply chain visibility by improving order forecasts and fulfillment through continuous communications among multiple supply chain partners. The nine-step process is comprised of: develop front-end agreement; create joint business plan; create sales forecasts; identify exceptions for sales forecasts; resolve/collaborate on exception items; create order forecasts; identify exceptions for order forecasts; resolve/collaborate on exception items; order generation (Logility, 2000).

CPFR brings mutual benefits to all the supply chain partners involved by utilizing more interactive, broader communication processes throughout the supply chain rather than relying on limited transaction-level automation. Other benefits of CPFR include: higher

inventory turnover, lower stock-out rate, improved order fill rate, improved cash flow; more accurate production scheduling, more amicable business relationships among supply chain partners, reduced cycle time, reduced order picking/receiving costs, reduced labor costs, and quicker response to customer needs (Barratt and Oliveira, 2001).

2.1.3 Efficient Consumer Response (ECR) Practices

Efficient consumer response (ECR) practice is a joint strategy for providers and distribution channels, dedicated to providing final consumers with the highest value, the best service and the greatest variety of products, by fitting together the needs coming from the firm's supply chain and the customers' needs. ECR is referred to as a system and sometimes as a movement. It initially began in Europe in order to eliminate the unnecessary costs in the supply chain and the need of looking for a faster and proper reaction to consumer demands (Ferre and Del Castillo, 1996). In 1992 the Grocery Manufacturers of America and the Food Marketing Institute created a group called Efficient Consumer Response. The main objective of ECR is to be able to react efficiently and timely to the changes and trends of consumer behavior via jointly set targets and harmonized business processes. The ECR initiative provides a framework for vertical collaboration between independent manufacturers and suppliers in the areas of replenishment, assortment and packaging.

2.1.4 Automotive Network Exchange (ANX) Practices

Automotive Network Exchange (ANX) practices represent an unprecedented collaboration by the Big Three automakers, Chrysler, Ford and General Motors and their

top suppliers. ANX is an extranet that will establish a standard way for parts suppliers to communicate with manufacturers. The system is owned by the Automotive Industry Action Group, (AIAG). It has been under development since 1996, and began full operation at the end of 1998. ANX could ultimately link as many as 40,000 automakers, parts suppliers, dealerships, and financial-service companies to share everything from groupware applications to e-mail and electronic data interchange (EDI) over a single Internet Protocol (IP) network, replacing a complex and costly network system of multiple connections formerly existing in the automotive supply industry. Because ANX combines industry-wide connectivity with a protocol that is application-independent, it will encourage higher speed connections among trading partners.

ANX is designed to be more reliable, more secure and faster than the public Internet. A. Gunasekaran, E.W.T. Ngai (2004) launching the automotive network exchange (ANX) to further understand the impending effects of electronic business communities. ANX will establish a standard method for parts suppliers to communicate with and obtain order information from the auto manufacturers (Graham and Hardaker, 2000).

2.1.5 Customer Relationship Management (CRM) Practices

Customer relationship management practices is defined as an all embracing approach that seamlessly integrates sales, customer service, marketing, field support and other functions that touch customers (Chou et al, 2002. If all customers were alike, there will be little need for CRM. As a result, understanding customer drivers and customer profitability, firms can better tailor their offerings to maximize the overall value of their

customer portfolio (Chen and Popovich, 2003). The attention CRM is currently receiving across businesses is due to the fact that the marketing environment of today is highly saturated and more competitive (Chou et al, 2002). According to Greenberg (2004), CRM generally is an enterprise-focused endeavor encompassing all departments in a business. As pointed out by (Day, 2000), committed relationships are the most sustainable advantages because of their inherent barriers to competition.

Good relationships with supply chain members, including customers are needed for enhanced organization performance (Moberg, Cutler, Gross and Speh, 2002). Goldenberg (2000) believes that CRM is not merely technology applications for marketing, sales and services but rather when it is successfully implemented; it enables firms to have cross-functional, customer-driven, technology-integrated business process management strategy that maximizes relationships. CRM helps companies improve customer retention and loyalty, cross sell and up-sell, reduce operating costs, and increase sales and revenue. CRM—and marketing in general—are critical in setting up an efficient demand chain.

2.1.6 Distribution Requirements Planning (DRP) Practices

Distribution requirements planning (DRP) practice is defined as the function of determining the need to replenish inventory at branch warehouses. The DRP system nets customer orders with forecasts and serves as the beginning pull in the system. Distribution requirements planning allow you to set up and maintain a truly integrated supply chain. A time phased order point approach is used where planned orders at the branch warehouse level are exploded via DRP logic to become gross requirements on the

supplying source. In the case of multilevel distribution networks, this explosion process can continue down through the various levels of regional warehouses (master warehouse, factory warehouse, etc) and become input to the master production schedule.

2.1.7 Enterprise Resource Planning (ERP) Practices

ERP is defined as "an integrated transaction processing and reporting system" providing "the means for tracking organizational resources, including people, processes, and technology" (Monczka et al., 2009). It is the backbone of an organization providing the information and support needed for decision making and creating connections between organizational processes. Framing the matter in terms of Porter's value chain (1985), ERP systems can enhance a firm's ability to compete in at least the following ways: Infrastructure-The ERP system provides comprehensive, integrated data for managing enterprise value creation: Human resource management- People are an organization's most important asset, though they do not appear on any financial statement as such. The ERP system can assist in managing virtually every major human resource related task, including hiring and recruitment, training and compensation, benefits management and retirement: Procurement-Purchasing staff can make notes on supplier performance; they can also cut down on paper by using electronic purchase orders and other documents. To achieve internal supply chain integration organizations typically use enterprise resource planning practices.

2.2 Organizational Performance

Performance measures are important to the effectiveness of an organization. Companies can no longer focus on optimizing their own operations to the exclusion of their suppliers' and customers' operations. Organization Performance Measures serve as an indicator of how well the organization is functioning. Measuring organization performance can facilitate a greater understanding of the organization and improve its overall performance (Gunasekaran *et al.* (2001)).

There is an emerging requirement to focus on the performance measurement of the organizations in which company is a partner (Charan et al., 2008). Companies have understood that for competing in continuously changing environment, it is necessary to monitor and understand firm performances. Previous studies put emphasis on investigating the impact of supply chain integration practices on organization performance (Rosenzweig et al., 2003). They suggest that supply chain integration practices are required to enable firms to deal with increasing complexity and uncertainty in the environment. They argue that highly integrated firms will gain competitive advantage over their competitors due to the increased information visibility and operation knowledge shared among members of their supply chain, as well as the reduction of the overall supply chain costs (Rosenzweig et al., 2003).

Internal functional integration practices have for instance been found to have a positive effect logistics performance (Germain and lyer, 2006) as well as failing to have a significant effect (Rodrigues et al., 2004). Researchers have also empirically concluded that supplier integration practices enhance product quality (Wong, Boon-itt and Wong, 2011). While other researchers have reported that the relationship is significantly negative (Swink, Narasimhan and Wang, 2007). Empirical research suggests customer integration has a positive in market success (Ko ufteros, Rawski and Rupak, 2010), a negative effect on market performance (Swink et al., 2007), and no direct effect on overall organizational performance (Flynn et al., 2010).

Therefore, a portfolio of performance measure is more valuable than relying solely on traditional profitability measure (Tangen, 2004). To accurately connect the effect of supply chain integration practices to specific organizational outcomes, performance in the analyzed studies is conceptualized in terms of:

2.2.1 Financial Performance

The variables that measure the performance construct are: investment return (Narasimhan and Jayaram, 1998), profit percentage on sales and invoicing gross value (Chen, Paulraj and Lado, 2004), invoicing increase, financial liquidity (Narasimhan and Kim, 2002).

2.2.2 Quality Performance

Quality has always been one of the most important performance measure in purchasing (Heizer and Render, 2005). They tell you how well you are performing an activity-accuracy, including conformity with technical project specifications and sales leadership in presenting products with quality characteristics (Carr and Kaynak, 2007. Garvin (1998) subdivides the concept in five perspectives: transcendent vision, product, user, production and value) and eight dimensions: performance characteristics, reliability, conformity, durability, customer service, esthetics and perceived quality.

2.2.3 Delivery/ Reliability Performance

Coyle et al. (2003) states three delivery dimensions: delivery speed, product led time and product reliability. It is the ability to reduce the time between order receipt and customer delivery to as close to zero as possible. It integrates production lead-time, which refers to the time between ordering a good, or a service and receiving it (Handfield and Nicholas, 1999). This will give customers realistic estimates on how fast their orders will be filled. Delivery reliability is about delivering desired quality as promised

2.2.4 Customer Relationship

Based on the working of Ballou (2004), elevating customer relationships 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 that must assure value for final customers.

2.2.5 Flexibility Performance

Chopra and Meindl (2004) defines the following flexibility dimensions: 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- the ability to accommodate delivery times for specific customers.

2.2.6 Cost Performance

It is related to the production of low unitary cost products (Narasimhan and Jayaram, 1998) or to the presentation of a product that is cheaper than or the same price as the competitor's one (Fynes, Voss and Burca, 2005).

2.3 Summary of Literature Review

For successful supply chain integration, management must decide on which mode to adopt. Such choices may and will naturally vary among alternative theaters of operations, because of macroeconomic, socio-cultural and comparative differences (Lindberg *et al.*, 1997). The supply chain literature seems to have arrived at an agreement that supply chain integration practices is required internally within and across functions , as well as externally across suppliers and customers(Steven, 1989; Morash and Clinton, 1998; Frohlich and Westbrook, 2001).

Following the resource-based view (Barney, 1991), which formulates that companies benefit from concentrating on their core competencies; supply chains are becoming increasingly fragmented. Therefore, partner integration practices play a key role in leveraging the efficiencies of optimal resource usage. Based on the transaction cost theory (Grant,1991; Willamson, 2008), management of both intra-company processes (Anderson, 1985) and company networks (Rindfleisch and Heide, 1997) will positively contribute to performance (Chen et al., 2003) if internal and external processes can be linked efficiently and with optimized interfaces. By combining the perspectives of the resource-based view for fragmented supply chains and the transaction cost theory for the interfaces between internal and external processes, supply chain integration practice is an effective measure for managers to improve their business (Bowersox et al., 1999).

2.4 Conceptual Framework

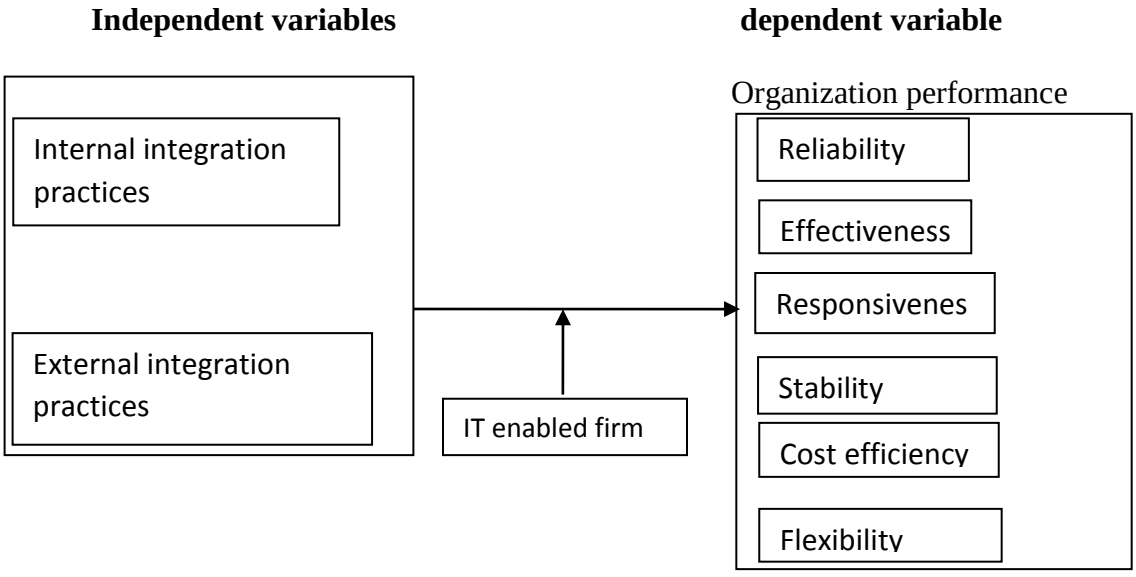

Figure 2.2 Conceptual Framework

Source: Researcher 2014

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the research methodology that was used for the study. The research design, target population, sample design, data collection and data analysis were discussed.

3.2 Research Design

A descriptive survey of Multinational Corporations in Kenya to identify supply chain integration practices and performance measures was conducted. Descriptive survey design was used as it is appropriate for educational fact-finding and would yield a great deal of information, which would increase the level of accuracy. The descriptive study reports summary data using only one measure of central tendency, the mode, and also correlation between variables.

3.3 Population

In this study, the population were all the Multinational Corporations operating in Kenya as at June, 2007. According to the Kenya Bureau of Statistics Economic Survey 2007 there were 226 Multinational Corporations in Kenya.

3.4 Sample Design

Basing on the sample size used by (Ogutu and Samuel, 2011) who did a study on strategies adopted by Multinational Corporations in Kenya by stratifying them according to the country of origin. Using disproportionate sampling technique as some categories are too small to be proportioned Using disproportionate sampling technique as some categories are too small to be proportioned, a sample size of 40 is deemed appropriate based on the following formula.

$S=x^2 NP (1-p) / d^2(N-1)+ X^2P(1-P).$

Where: s= required sample size

X^2= table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N= the population size

P= population proportion (assumed to be .50)

D= the degree of accuracy expressed as a proportion (.05)

$$S=\frac{3.84^2*226*.5(1-226)}{.05^2(226-1)+3.841^2*226(1-226)}$$

S=40

3.5 Data Collection

Primary data was collected by means of closed ended questionnaires. The questionnaire had three sections. Primary data was collected by means of closed ended questionnaires.

The questionnaire had three parts. Section 1 sought to find out general information about the multinational. Part 11 sought to seek information on supply chain integration practices adopted by multinational firms in Kenya and part 111 aimed to find information on the relationship between supply chain integration practice and performance of multinational firms. The respondents to the questionnaire were senior managers and departmental heads of the multinational firms in Kenya.

A drop and pick later method was used in administering the questionnaires for the MNCs within Nairobi, and e-mailed to those located outside Nairobi.

3.6 Data Analysis

In order, to find out supply chain integration practices used by multinational firms in Kenya, descriptive statistics analysis such as use of frequency distribution, mean and standard deviation were used to analyze quantitative data. Regression analysis was also used to determine the relationship between supply chain integration practices and performance of multinational firms. The findings were presented in tables and interpreted accordingly in chapter four. The final summary and study conclusions were presented in chapter five as well as recommendations.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4. I Introduction

This chapter presents the research findings on supply chain integration practices and organizational performance of the multinationals in Kenya. The study questions were "What are the supply chain integration practices carried out by multinational firms in Kenya? What is the relationship between the supply chain integration practices and performance of the multinational firms in Kenya? The study sampled out 40 multinational organizations where one respondent was expected to participate from each of the organizations. Therefore the actual sample size was 40. Out of this, 28 participated in the study giving a response rate of 70% which is acceptable according to Creswell, 2012). The chapter has been presented in the following subsections.

4.2 General Information

This section presented data on the positions held by the respondents in the organizations and the sectors under which each of the organizations serve. The responses were presented as follows.

4.2.1 Positions Held by the Respondents in the Organizations

The first item sought to establish the positions held by the respondents in the various organizations. They response was presented in table 4.1.

Table 4.1: Positions Held by the Respondents

Positions	Frequency	Percent
Senior level (MD,CEO, Board of Director)	1	4
Stores manager/procurement personnel	25	89
Sales / marketing manager	2	7
Total	28	100.0

The results show that most of the respondents occupy the positions of stores manager or procurement manager or personnel manager at 89%. They were followed by the sales or marketing managers at 7% then the senior level managers such as Managing Directors, Chief Executive Officers or Board of Directors at a response rate of 4%.

4.2.2. Organizations Sector

Then the respondents were asked to indicate their sectors under which their organizations operate from a list of sectors given. The response was presented in table 4.2.

Table 4.2: Organizations Sector

Sectors	Frequency	Percent
Financial services/ insurance	3	10.7
Automotive	4	14.28
Capital projects/ infrastructure	1	3.57
Energy, utilities and mining	1	3.57
Health care, pharmaceuticals and Life sciences	4	14.28
Manufacturing / textile	5	17.85
Retail and Consumer	4	14.28
Transportation, logistics and technology	6	21.48
Total	28	100.0

Most of the organizations were drawn from transportation, logistics and technology sector at a response rate of 21.48%. They were followed by the organizations drawn from

manufacturing/ textile as well as financial service / insurance, retail and consumer, health care, pharmaceutical and life sciences at 14.28% each.

4.3 Supply Chain Integration Practices

4.3.1 Vendor (supplier) Managed Inventory Practices

The researcher identified eight aspects of vendor (supplier) managed inventory practices adopted by various organizations across the world. The respondents were then required to state the extent to which such practices were practiced in their respective organizations. They response was presented in table 4.3.

Table 4.3: Vendor (supplier) Managed Inventory Practices

Supply Chain Integration Practices	Mean	Std. Deviation
Firms vendors have access to the customers' inventory data to ensure efficient inventory management	3.63	1.674
Firm partners have the responsibility of maintaining inventory levels required by the customers to better manage the inventory	3.05	1.840
The firm's inventory data is integrated through departments within the organization to streamline inventory decisions	3.00	1.414
The firm's suppliers makes inventory replenishment decisions for better inventory management	2.79	1.813
The firm links customers directly with its distributors to	2.74	1.593

enhance delivery /location flexibility		
The firm practices integrated production planning with suppliers/ manufactures, distributors to facilitated optimal production	2.47	1.712
The firm's customers are involved in inventory planning schedules to enhance delivery reliability	2.05	1.615

According to the findings, the firms' vendors have access to the customers' inventory data to ensure efficient inventory management at a mean score of 3.63. Giving partners the responsibility of maintaining inventory levels required by the customers to better manage the inventory was ranked second at a mean score of 3.05. Then the firms' inventory data was found to have been integrated through departments within the organizations to streamline inventory decisions at a mean score of 3.00. Another practice that is common among the firms is giving the firms' suppliers a chance to make inventory replenishment decisions for better inventory management at a mean score of 2.79.

Linking of customers directly with distributors to enhance delivery and location flexibility was also common at a mean score of 2.47. Involving the firms customers in inventory planning schedules in order to enhance delivery reliability was least practiced as 2.05 mean score.

4.3.2 Collaborative Planning, Forecasting and Replenishment Practices

The respondents were given statements that denote the practice of collaborative planning, forecasting and replenishment. They were asked to show the extent to which they agreed with such practices as taking place in their respective organizations. They responded as given in table 4.4.

Table 4.4: Collaborative Planning, Forecasting and Replenishment

	Mean	Std. Deviation
Firms develops from end agreement on operations with key partners to streamline business operations	3.63	1.674
The firms trading partners exchange information that helps in joint business planning to align goals	3.05	1.580
The firm creates sales forecasts in close collaboration with key suppliers/manufactures/distributors to reduce stock outs/waste	3.05	1.840
The firm regularly visits/face to face communication with partners to facilitate collaborative relationship	3.00	1.414
The firms involves its customers in product design to enhance customer satisfaction	2.79	1.813
The firm has a close collaboration with suppliers/manufactures to perform logistics synchronization	2.74	1.593
The firm practices collective learning with	2.47	1.712

suppliers/manufacturers to facilitate joint operation improvement		
The firm sets targets and harmonizes business processes with suppliers/ manufacturers for smooth operations	2.37	1.422
The firm collaborates with its manufacturers/ vendors and customers in order generation to prevent stock-outs/ waste	2.05	1.615
The firms' trading partners share business knowledge to enhance operation improvement	2.05	1.508
The firms trading partners keep each informed about events or changes that may affect the other partners.	2.00	1.414

The most common form of collaboration planning, forecasting and replenishment among the multinationals in Kenya was the development of agreements with key partners on operations to stream line business operations at a mean score of 3.63. The exchange of information by the firms trading partners to help in joining business planning and alignment of goals was also common among the firms at a mean rating of 3.05 as well as the creation of sales forecast in collaboration with key suppliers/manufacturers/ distributors to reduce stock outs/waste. Then the firms ensured regular visits and face to face communication with partners to facilitate collaborating relationship at a mean score of 3.00.

The other form of collaborative practice common among the firms was the involvement of the firms' customers in product design to enhance satisfaction at a mean rating of 2.79.

Then the firms ensured close collaboration with suppliers/manufacturers to perform logistics synchronization at a mean rating of 2.47. The setting of targets and harmonization of business processes with suppliers/ manufacturers for smooth operations was practiced at a mean score of 2.37. While collaboration with manufactures/vendors and customers in order generation to prevent stock outs/waste and the sharing of business knowledge by the firms' business partners to enhance operations was also common at a mean rating of 2.05 each. The least practiced form of collaboration was sharing of information between firm partners about the events/changes that may affect them at a mean score of 2.00.

4.3.3. Efficient Consumer Response Practices

The researcher then identified factors that imply efficient consumer response practices. The respondents were asked to state the extent to which such practices were present in their organizations. The response was presented in table 4.5.

Table 4.5: Efficient Consumer Response Practices

	Mean	Std. Deviation

Your organization's supply chain relationship with your customers is more cooperative that adversarial	2.53	1.222
The firm synchronizes the customer's needs with its suppliers/manufactures	2.47	1.172
The firm jointly sets targets with suppliers/manufacturers and close partners	2.42	1.121
The firm resolves/collaborates with suppliers/manufacturers on exception items	2.31	1.108
The firm has a framework for collaboration in the areas of assortment and packaging	2.26	1.240
The firm directly links its customers with manufactures / distributors to enhance and facilitate quick responses for any query	2.11	1.049

From the findings, the firms were found to practice a cooperative supply chain relationship with their customers at 2.53 mean rating. This practice was followed by the synchronization of customers' needs together with suppliers/manufactures at a mean rating of 2.47. With a mean score of 2.42, the firms were found to jointly set targets with suppliers/manufactures and close partners. The concept of resolving and collaborating with suppliers/manufactures on exception items was also common at a mean score of 2.31 where as having frameworks for collaboration in the areas of assortment and packaging was practiced among the firms at mean rating of 2.26. Making direct links

with customers and manufacturers/distributors to enhance and facilitate quick response for any queries was least practiced at a mean score of 2.11.

4.3.4 Customer Relationship and Management Practices

The researcher sought to find out the customer relationship and management practices that are common among the multinationals in which they were asked to show the extent to which they practice them in their organizations. The response was presented in table 4.6.

Table 4.6: Customer Relationship and Management Practices

Customer Relationship and Management Practices	Mean	Std. Deviation
The firm has routine/ regular measures of customer service	3.9	9.294
The firm frequently interacts with customers to set reliability, responsiveness, and other standards for the firm	2.1	1.410
The firm closely collaborates with customers to jointly plan and create value, differentiated by class of customers	2.0	1.291
The firm strives to improve primary products/services in order to achieve greater customer satisfaction	1.9	1.268
The firm practices close collaboration with distributor channel intermediaries and suppliers to achieve the value each end customer wants	1.9	1.197
The firm integrates various touch points e.g web, e-mail,	1.8	1.015

phone , direct sales with the customers		
The firm recognizes the individual needs of its employees and tries to provide each with the value they want from the company to enhance customer satisfaction	1.8	1.134
The firm facilitates customer's ability to seek assistance/ clarification from the firm	1.8	1.947
The firm creates a self service capability to enable employees to take more control of their careers	1.8	0.787
The firm regularly sends complimentary messages/ gifts to its customers during special occasions	1.7	1.046
The firm periodically evaluates the importance of its relationship with its customers	1.4	0.607

At a mean score of 3.9, having routine /regular measures of customer services was one of the most practiced concepts among the multinationals. Frequently interacting with customers to set reliability, responsiveness and other standards was also ranked at a mean score of 2.1. The other common practice was having close collaboration with customers to ensure joint plans, create values and differentia customer's class was another common practice at a mean score of 2.0. Then the concept of striving to improve primary products/services in order to achieve greater customer satisfaction was rated at a mean score of 1.9 as well as ensuring collaboration with distributors, intermediaries and suppliers to achieved the values of each end customer wants.

The other common practices among the multinationals were integration of various touch points e.g web, e-mail, phone , direct sales with the customers, recognition of the individual needs of the employees and trying to provide each with the value they want from the company to enhance customer satisfaction, facilitation of customer's ability to seek assistance/ clarification from the firm, creation of a self service capability to enable employees to take more control of their careers and sending regular complimentary messages/ gifts to their customers during special occasions at a mean score of 1.8 each. Finally the firms were found to periodically evaluate the importance of their relationships with their customers at a mean score of 1.4.

4.3.5 Enterprise Resource Planning Practices

The other form of practices on supply chain integration practices were in the area of ERP. In this area the researcher indentified some practices in which the respondents were expected to give the level of extent to which they agree. The response was presented in table 4.7.

Table 4.7: Enterprise Resource Planning Practices

Enterprise Resource Planning Practices	Mean	Std. Deviation
The firm has integrated its data among internal functions/	1.8	0.787

departments		
The firm has integrative inventory management	1.9	1.268
The firm has real-time integration and connection among all internal functions from raw material management through production, shipping and sales	1.9	1.197
The firm's the practice of sharing of schedules with suppliers/ customers is achieved electronically	1.7	0.933
For your firm, e-business is an active and key integration strategy (visibility of crucial supply chain information is electronically to partners. E.g. available-to-promise, due-date quoting, order status	1.8	1.228
Transactional activities such as order placement, order amendment, invoices and payment between your firm and suppliers/distributors/customers are extensively e-enabled	1.7	1.157
The firm's internal functions are extensively integrated ie an integrative accounting/ finance system/ human resource/ customer care	1.4	0.597
The firm's customers shares point of sale (POS) information with the firm	1.7	1.157

The most common ERP practices were integrative inventory management by the firms and implementing real-time integration and connection among all internal functions from raw material management through production, shipping and sales at mean score of 1.9

each. There was also the integration of data among internal functions/ departments, e-business and visibility of crucial supply chain information electronically to partners through available-to-promise, due-date quoting, and order status at a mean score of 1.8 in each case. Integration of the firm's internal functions extensively i.e having an integrative accounting/ finance system/ human resource/ customer care was least practices at a mean score of 1.4.

4.4 Organizational Performance Measures

This section presents information on the measures that were used to measure organization performance. The results were presented as follows.

4.4.1 Operation Performance

The researcher identified some measures of organizational performance in which the respondents were required to state their level of agreement. The response was presented in table 4.8.

Table 4.8: Operation Performance

Operation Performance	**Mean**	**Std. Deviation**
The firm can quickly modify products to meet its major customer's requirements	2.5	1.219

The firm can quickly introduce new products into the market	2.5	1.172
The firm can quickly respond to the changes in market demand	2.4	1.121
The firm has an outstanding on-time delivery record to our major customers	2.3	1.108
The firm's corporate social responsibility has increased (companies level of fulfilling social responsibility)	2.3	1.240
The firm's employees are motivated to work hard	2.1	1.049
The firm's publicity has improved	1.9	0.737
The firm's lead time for fulfilling customer's orders (the time which elapses between the receipt of customer's order and the delivery of the goods) is short	1.8	0.787

In order to ensure that the organizations performed as expected, most of the respondents indicated that they have had to modify their products/services to meets most of the customers' needs and have introduced new products in the markets at a mean score of 2.5 each. They other strategies that have been employed in maintaining operation performance is making quick responses to changes in the market demands at a mean score of 2.4, ensuring outstanding on-time delivery records to their major customers and increasing their corporate social responsibilities at a mean score of 2.3 in each case. At a mean score of 2.1, they employees in the firms are motivated to work hard, the firms have improved publicity at a mean score of 1.9 while the use of lead time to fulfill customer's needs was rated at a mean score of 1.8.

4.4.2 Business Performance Measures

To measure the level of business performance, the respondents were asked to state their level of agreement with the statements presented in table 4.9.

Table 4.9: Business Performance Measures

Business Performance	Mean	Std. Deviation
Supply chain integration practices leads to organizational effectiveness	2.9	4.932
Supply chain integration practices have enhanced the firm's delivery performance	2.6	1.121
The organizational annual sales have increased	2.5	1.172
The manufacturing lead time has decreased	2.5	1.124
Supply chain integration practices have led to improved product/service quality	2.3	1.003
The firm's response rate to market variability have greatly improved	2.2	1.032
The practices have lowered the product prices compared to its competitors	2.2	0.958
By defining the firm's days of inventory, the days of inventory have decreased	2.1	1.049
The firm's return on-capital-margin has increased	1.8	0.419

Supply chain integration practices results in increased productivity	1.7	0.562

When asked whether supply chain integration practices leads to organizational effectiveness, most of the respondents strongly agreed at a mean score of 2.9. At the same time enhancing the firms' delivery performance through supply chain integration practices were rated at means score of 2.6. Further the concept of integrating supply chain practices have also increased the organizational annual at mean score of 2.5 and decreased the manufacturing lead time at 2.5, improved product/service quality and lowering the product prices compared to its competitors at mean score of 2.2, defining the firm's days of inventory, the days of inventory have decreased at a mean score of 2.1, The firm's return on-capital-margin has increased 1.8 and increased productivity at 1.7.

4.4.3 Firm's Relationship with Suppliers and Customers

When the respondents were asked to state the relationship that exists between their firms and their suppliers and customers, 68.4% said that it's collaborative while 15.8% felt that it is adversarial. The response was presented in table 4.10.

Table 4.10: Firm's Relationship with Suppliers and Customers

Firm's Relationship	Frequency	Percent
Adversarial	12	15.8
Collaborative	33	68.4

Total	35	100.0

4.5. Regression Analysis to Test the Relationship between Supply Chain Integration practices and Performance of the Multinationals in Kenya.

In order to test for this relationship, the attributes in each of the supply chain integration practices that had the highest mean score was taken a representatives, i.e Firms vendors have access to the customers' inventory data to ensure efficient inventory management = Vendor (supplier) Managed Inventory Practices, firms develops from end agreement on operations with key partners to streamline business operations = collaborative planning, forecasting and replenishment, Your organization's supply chain relationship with your customers is more cooperative that adversarial, = efficient consumer response practices, the firm has routine/ regular measures of customer service = customer relationship and management practices, the firm has integrative inventory management = ERP practices, the firm can quickly modify products to meet its major customer's requirements = operational performance, supply chain integration practices leads to organizational effectiveness = business performance measure. The output was presented in the following order

Table 4.11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	.405[a]	.164	.157	1.33416

The model summary explain the coefficient of determination which shows that the above attributes account for 16.4% (r squared) of the all the factors affecting performance of multinationals in Kenya. The other 64.6% can be explained by other factors not considered in this model.

Table 4.12: ANOVA (Analysis of Variance)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4.544	5	.909	.511	.004[b]
Residual	23.140	13	1.780		
Total	27.684	18			

From the table, the p value which is 0.004 (sig. = 004) shows that there is significant correlation between dependent variable organizational performance and independent variable supply chain integration practices ($p<0.05$). It shows the positive correlation among these variables. So this model is significant and reliable to measure the relationship between supply chain integration practices and performance of multinationals in Kenya.

Table 4.13 shows the regression coefficients of the variables. Its purpose is to demonstrate the specific influence of the independent variables on the dependent variable. This are presented as shown.

Table 4.13: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.794	.774		2.317	.037
A	.420	.270	.535	1.556	.144
B	.196	.284	-.224	-.690	.502
C	.195	.279	-.216	-.698	.497
D	.016	.036	-.121	-.452	.658
E	.049	.286	.050	.170	.868

The table shows the relationship between the dependent variable and the independent variables using the model shown below.

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$

Where

Y = Organization Performance

X1 = A = Vendor (supplier) Managed Inventory Practices

X2 = B = Collaborative planning, forecasting and replenishment

X3 = C = Efficient consumer response practices

X4 = D = Customer relationship and management practices.

X5 = E = ERP practices

ε = Error term

When the values of coefficients are substituted, them the model takes the following form.

$Y = 1.794 + 0.420X_1 + 0.196X_2 + 0.195X_3 + 0.016X_4 + 0.049X_5 + 1.33416.$

These results were then interpretated as follows.

The results shows that without considering the vendor (supplier) managed inventory practices, collaboration planning, forecasting and replenishment, efficient consumer response practices, customer relationship and management practices and ERP practices, performance of the multinationals is constant at 1.794. However by introducing vendor (supplier) managed inventory practices, the firms' performance improves by 0.420, collaboration planning, forecasting and replenishment leads to 0.196 improvement in the multinational performance, efficient consumer response practices leads to 0.195 improvement on performance of the multinationals, customer relationship and management practices leads to 0.016 improvement on performance of multinationals in Kenya, while ERP practices leads to 0.049 improvement on performance of the multinationals.

CHAPTER FIVE

SUMMARY OF THE STUDY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter finalizes the study on the relationship between supply chain integration practices and organizational performance of multinationals in Kenya. It presents the summary of the findings, conclusions and recommendations of the study.

5.2 Summary of Findings and Recommendations

In the first step, supply chain integration practices most practiced by multinational firms in Kenya were identified, amongst these customer relationship management practices, vendor managed inventory practices and collaborative planning, forecasting and replenishment practices were highly ranked. In the second step the researcher assessed the relationship between internal integration and external integration practices on operation and business t direct relationship between performances. The results of the regression analysis indicate that there is significance between supply chain integration practices and both operational and organizational performance.

When asked whether supply chain integration practices leads to organizational effectiveness, most of the respondents strongly agreed at a mean score of 2.9. At the same time enhancing the firms' delivery performance through supply chain integration

practices were rated at means score of 2.6. Further the concept of integrating supply chain practices have also increased the organizational annual at mean score of 2.5 and decreased the manufacturing lead time at 2.5, improved product/service quality and lowering the product prices compared to its competitors at mean score of 2.2, defining the firm's days of inventory, the days of inventory have decreased at a mean score of 2.1, The firm's return on-capital-margin has increased 1.8 and increased productivity at 1.7

When compared to previous research on supply chain integration practices, the findings that supply chain integration practices was significantly related to operational performance is consistent with studies by (Stank et al., 2004, and Zailani and Rajagopali, 2005). Thus, this research reinforces the importance of supply chain integration practices in improving organizational performance.

5.3 Conclusion

The study concludes that performance of the multinationals has improved because the vendors have access to customer's inventory data to ensure efficient management, they give their partners the responsibility of maintaining inventory levels as required by their customers, they have integrated data management within the departments, suppliers have the free hand to make inventory replenishment decisions and have linked their customers with distributors to enhance delivery and location flexibility.

The forms of collaborative, forecasting and replenishment practices among the multinationals are development of agreements with key partners on operation to streamline business operation, exchange of information by the firms trading partners to help in joining business planning and alignment of procurement goals with organizational goals, creation of sales forecast in collaboration with key suppliers/manufacturers/ distributors to reduce stock outs/waste and ensuring regular visits and face to face communication with partners.

Further the firms performance has been improved through employment of efficient consumer response practice. In this sense the firms were found to practice a cooperative supply chain relationship with their customers, synchronization of customers' needs together with suppliers/manufactures, jointly set targets with suppliers/manufactures and close partners, resolve and collaborate with suppliers/manufactures on exception items, have frameworks for collaboration in the areas of assortment and packaging and have direct links with customers and manufacturers/distributors to enhance and facilitate quick response for any questions.

Strategies that have been employed to promote customer relationship and management practices are having routine/regular measures of customers, frequently interacting with customers to set reliability, responsiveness and other standards, having close collaboration with customers to ensure joint plans, create values and differential customer's class and striving to improve primary products/services in order to achieve

greater customer satisfaction as well as ensuring collaboration with distributors, intermediaries and suppliers to achieve the values of customer wants.

The ERP practices are have led to improved performance of the multinationals are integrative inventory management by the firms and implementing real-time integration and connection among all internal functions from raw material management through production, shipping and sales, integration of data among internal functions/ departments, e-business and visibility of crucial supply chain information electronically to partners through available-to-promise, due-date quoting, and order status and integration of the firm's internal functions extensively.

5.4 Recommendations

The study recommends that the various multinational firms in Kenya adopts the supply chain integration practices extensively as it has established the positive effect it has on both operational and business performance of an organization. However, it contradicts (Bowersox, 1989) findings that organizations that are integrated internally to the largest extent are viewed as being extensively integrated. From the findings, internal integration does not translate to extensive external integration. This study extends the existing research on supply chain integration practices in several ways.

First, it identifies the specific integration practices commonly adopted by multinational firms in Kenya. It further empirically tests the relationship between the supply chain integration practices and organizational performance. Therefore, this study adds greater comprehensiveness of the supply chain integration practices and enhances our understanding of the supply chain integration practices and their impact on organizational performance. From the findings, good relationships with supply chain members including customers are needed for enhanced organizational performance just as (Moberg, Gross and Speh, 2002) discovered on their study. Therefore organizations should strive to embrace customer relationship practices as it has been shown committed relationships are the most suitable advantages because of their inherent barriers to competition.

5.5 Suggestions for Further Study

The study recommends that a similar study be done on the public organizations and locally owned organizations for comparison on whether they have adopted the supply chain integration practices as well as on the organizational performance as influenced by the practices.

While this study makes significant contribution to supply chain integration practices literature, it calls for more research that is not just confined to the supply chain integration practices of multinational firms in Kenya but also on the factors affecting supply chain integration practices such as organizational culture, environmental factors

and other social economic, factors as this greatly affects the supply chain integration practices and operations of an organization.

5.6 Limitations of the Study

The study used a sample size of 40 multinationals in the country out of which 28 responded, due to the limitations of time and finances, organizational protocols and time frame for appointments and to this end, the 46 study recommends that future studies use a higher sample size in order to increase the reliability of the data obtained.

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APPENDIX I: RESEARCH QUESTIONNIARE

Instructions

This survey consists of three parts. Coverage of each part is as follows:

Part 1- General questions to do with your multinational.

Part 11- Specific questions to do with your multinational's supply chain integration practices.

Part 111- Your multinational's performance.

Part iv- Open ended questions.

√

Please enter your name and email address here if you wish to receive a copy of the aggregated results of this survey:

Name:

…….

Email:

You are asked to answer each question by ticking the box most appropriate for your organization. In some questions you are asked to enter a numerical value.

It is estimated that it will take you about 15 minutes to complete this survey.

Part 1: The organization

1. Your position in your organization is:

   ☐ Senior level (MD, CEO or Board of Director)

   ☐ Customer service manager

☐ Stores manager / procurement personnel

☐ Human resource manager

☐ Sales/marketing manager

☐ Public relations officer

☐ Finance manager

2. Your organization's sector is:

	Financial services / insurance
	Automotive
	Capital projects/ infrastructure
	Communications, entertainment & media
	Energy, utilities & mining
	Healthcare , pharmaceuticals & life sciences
	Manufacturing / textile
	Hospitality & leisure
	Retail & consumer
	Transportation, logistics & technology

Part 11: **Supply chain integration practices**

1. This section of the questionnaire asks you to provide information about the supply chain integration practices adopted by your multinational. Supply chain integration practices may be thought of as, 'practices that use information to enhance coordination, collaboration, interaction, information flow linkage and business process linkage with the firm's partners to enhance organizational performance.

The item scales are five-point Likert type scales with 1=very great extent, 2=great extent, 3=moderate extent, 4=small extent, 5= very small extent

1.Vendor (supplier) Managed Inventory Practices	**1**	**2**	**3**	**4**	**5**
The firm's vendors have access to the customer's inventory data to ensure efficient inventory management					
The firm's vendors have the responsibility of maintaining inventory levels required by our customers to better manage the inventory					
The firm's partners delays product assembly activities until customer orders have actually been confirmed to facilitate product flexibility					
The firm's inventory data is integrated through departments within the organization to streamline inventory decisions					
The firm's suppliers makes the inventory replenishment decision for better inventory management					
The firm links our customers directly with its distributors to enhance delivery/ location flexibility					
The firm practices integrated production planning with suppliers/ manufacturers/distributors to facilitate optimal production					
The firm's customers are involved in inventory planning schedules to enhance delivery reliability					
2. Collaborative planning, forecasting and replenishment practices	**1**	**2**	**3**	**4**	**5**
The firm develops front end agreement on operations with key partners to streamline business operations					
The firm's trading partners exchange information that helps in joint					

business planning to align goals					
The firm creates sales forecast in close collaboration with key suppliers/ manufactures/distributors to reduce stock outs/ waste					
The firm regularly visits/ face to face communication with our partners to facilitate collaborative relationship					
3. Collaborative planning, forecasting and replenishment practices					
The firm has close collaboration with suppliers to perform logistics synchronization					
The firm practices collective learning with suppliers/ manufacturers to facilitate joint operation improvement					
The firm sets targets and harmonized business processes with suppliers/manufactures for smooth operations					
The firm collaborates with its customers in product design on exceptional items					
The firm collaborates with its manufacturers/ vendors and customers in order generation to prevent stock-outs/ waste					
The firm's trading partners share business knowledge to enhance operation improvement					
The firms trading partners keep each informed about events or changes that may affect the other partners					

4. Efficient consumer response practices	**1**	**2**	**3**	**4**	**5**
Your organization's supply chain relationships with your customers is more					

cooperative than adversarial					
The firm synchronizes the customer's needs with its suppliers/ manufactures					
The firm jointly sets targets with suppliers/ manufacturers and close partners					
The firm resolves/ collaborates with suppliers/ manufacturers on exception items					
The firm has a framework for collaboration in the areas of assortment and packaging					
The firm directly links its customers with manufactures/ distributors to enhance and facilitate quick responses for any query					
5. Customer relationship and management practices	**1**	**2**	**3**	**4**	**5**
The firm has routine/ regular measures of customer service					
The firm frequently interacts with customers to set reliability, responsiveness, and other standards for the firm					
The firm closely collaborates with customers to jointly plan and create value, differentiated by class of customers					
The firm strives to improve primary products/services in order to achieve greater customer satisfaction					
The firm practices close collaboration with distributor channel intermediaries and suppliers to achieve the value each end customer wants					
The firm integrates various touch points e.g web, e-mail, phone , direct sales with the customers					
The firm recognizes the individual needs of its employees and tries to					

provide each with the value they want from the company to enhance customer satisfaction					
The firm creates a self service capability to enable employees to take more control of their careers					
The firm regularly sends complimentary messages/ gifts to its customers during special occasions					
6. Customer relationship and management practices	1	2	3	4	5
The firm facilitates customer's ability to seek assistance/ clarification from the firm					
7. Enterprise resource planning practices	**1**	**2**	**3**	**4**	**5**
The firm has integrated its data among internal functions/ departments					
The firm has integrative inventory management					
The firm has real-time integration and connection among all internal functions from raw material management through production, shipping and sales					
The firm's the practice of sharing of schedules with suppliers/ customers is achieved electronically					
For your firm, e-business is an active and key integration strategy (visibility of crucial supply chain information is electronically to partners. E.g. available-to-promise, due-date quoting, order status					
Transactional activities such as order placement, order amendment, invoices and payment between your firm and suppliers/distributors/customers are extensively e-enabled					
The firm's internal functions are extensively integrated ie an integrative					

accounting/ finance system/ human resource/ customer care					
The firm's customers shares point of sale (POS) information with the firm					

Part 111: **Organization performance measures**

1. **Operation performance**: please indicate the extent to which your organizational performance has been improved by adopting the supply chain integration practices.

   The item scales are five-point Likert type scales with 1=strongly agree, 2=agree 3=neither agree nor disagree, 4=disagree, 5= strongly disagree

Operational performance	**1**	**2**	**3**	**4**	**5**
The firm can quickly modify products to meet its major customer's Requirements					
The firm can quickly introduce new products into the market					
The firm can quickly respond to the changes in market demand					
The firm has an outstanding on- time delivery record to our major customers					
The firm's corporate social responsibility has increased (companies level of fulfilling social responsibility)					
The firm's employees are more motivated					
The firm's publicity has improved					
The firm's lead time for fulfilling customer's orders (the time which elapses between the receipt of customer's order and the delivery of the goods) is short					

2. **Business performance**: what effect does supply chain integration practices being adopted by your multinational have on the following performance aspects? 1=strongly agree, 2=agree 3=neither agree nor disagree, 4=disagree, 5= strongly disagree

Business performance measures	**1**	**2**	**3**	**4**	**5**
Supply chain integration practices leads to organizational effectiveness					
The supply chain integration practices have enhanced the firm's delivery performance. Given that % of delivery performance of customer's order is= (number of orders delivered on- time/ number of orders due)*100					
The organization's annual sales have increased					
The firm's manufacturing lead time has decreased. Manufacturing lead-time is defined as the average time it takes from launch of raw materials to the time that finished products are ready for dispatch.					
Supply chain integration practices have led to improved product/ service quality					
The firm's response rate to market variability has greatly improved (fluctuations in demand)					
The practices have led to lowered product prices compared to that of the firm's major competitors					
Defining 'days of inventory' as=(annual average Sh.value of your organization's trading stock) / ((annual sh.cost of sales (e.g. Material, labor, energy, supplies-used-in production period + depreciation-selling					

and administration expenses)/365). The firm's days of inventory have decreased.					
Your firm's return- on -capital- margin (ROC margin=((net operating profit after tax/ total capital employed)*100)-% cost of Capital) has increased.					
The firm's flexibility has improved. Flexibility is defined as the ability to accommodate special customer service request; order flexibility is the ability to modify order size.					
Supply chain integration practices results to increased productivity					

APPENDIX II: LIST OF MULTINATIONALS IN KENYA

Company	Home country	Sector
Egypt Air	Egypt	Aviation
Mantrac Group	Egypt	Authorized Distribution and Support of Caterpillar Construction Machines
Air Mauritius	Mauritius	Aviation
British American Investment	Mauritius	Finance
Ecobank	Togo	Financial Services
Air Zimbabwe	Zimbabwe	Aviation
Innscor International Franchising	Zimbabwe	Fast Food Brands like Galitos, Chicken
Oilibya	Libya	Refined products
Zakhem International Construction limited	Lebanon	Construction, engineering and construction
Ethiopian Air	Ethiopia	Aviation
Regal Press Kenya Limited	Canada	Printing
Research In Motion	Canada	Telecommunications equipment
Tiomin Resources Inc.	Canada	Mining
Unigraphics Kenya limited	Canada	Printers
CMA CGM Kenya Ltd	France	Container Transportation and Shipping
Peugeot Kenya	France	Motor vehicles
SDV Transami	France	Cargo agents/Freight Forwarders
Total Kenya Ltd	France	Petroleum products
UAP Provincial Insurance Company Ltd	UK	Insurance

Abercrombie & Kent Tours Ltd	UK	Tourism-Hotels and Tours
African Highland Produce Company Limited	UK	Agriculture and Fishing
Afsat Communications Ltd	UK	Data network solutions
Amiran Kenya Limited	UK	Wholesale trade
Aon Minet Insurance Brokers Limited	UK	Professional Services
Avery Kenya Limited	UK	Weighing Equipment
Avon Rubber company	UK	Rubber and polymer-based products
Barclays Bank of Kenya limited	UK	Finance/Banking
Berger Paints	UK	Paints
Beta Healthcare	UK	Healthcare
BOC Kenya Ltd	UK	Industrial gases
Bonar EA ltd	UK	Plastic bags
Booker Tate	UK	Development, Management and Technical services in Agribusiness
BracklaNodor Ltd	UK	Dartboards
British Airways	UK	Aviation
British American Tobacco	UK	Tobacco/Cigarettes
British Broadcasting Corporation	UK	Media
Cadbury Kenya	UK	Confectionery
CarnaudMetalbox (K) Ltd	UK	Metal packaging
Cussons & Company	UK	Personal care products
Ernst & Young	UK	Professional services
Fairview Hotel	UK	Hotels
Glaxo Smithkline (Kenya) ltd	UK	Pharmaceuticals and health products

Holam Brothers EA (Broom and wade)	UK	Engineering and manufacturing
Hotel Inter-Continental Nairobi	UK	Hotels and restaurants
L.G. Harris & Co EA Ltd	UK	Painting accessories
Minet ICDC Insurance Brokers	UK	Insurance
Nairobi Hilton Hotel	UK	Hotels
Old Mutual Group	UK	Financial Services
Posterscope Kenya(Aegis grp)	UK	Outdoor Advertisement services
Price Waterhouse Coopers	UK	Auditing and Professional services
Reckitt Benckiser	UK	Toiletries and Domestic Chemicals
Rentokil Ltd	UK	Business Services
Reuters	UK	Media
Ryden International	UK	Property Consultants
SAB Miller	UK	Brewing, Beverages
Sage group	UK	Computer Software
Securicor	UK	Guarding, Courier and Alarm services
Shell-British Petroleum	UK	Petroleum Products
Silentnight	UK	Furniture
Standard Chartered Bank Kenya	UK	Finance
TreadsettersTyres	UK	Tyres
Tullow Oil	UK	Oil and Gas Exploration
UDV Kenya(Guinness)	UK	Brewery
Unilever Kenya Limited(Unilever PLC)	UK	Consumer Goods
Vitacress Kenya Ltd.	UK	Agriculture
Vitafoam	UK	Foam Mattresses

Vodafone (Safaricom)	UK	Tele-com
Wheetabix Limited	UK	Wheat breakfast Cereal
Wigglesworth &company limited	UK	Production and merchandising raw fiber-sisal, hemp, e.t.c.
Williamson Tea Holdings	UK	Cultivation and sale of tea
Acme Press (Kenya) Ltd	USA	Printers
Caltex Oil (Kenya) Limited	USA	Oil Refinery Products
Chase Bank Kenya	USA	Banking and Finance
Cisco Systems	USA	Networking Equipment
Coca Cola	USA	Soft drink and beverage manufacture
Citi Bank Na Limited	USA	Finance
Colgate-Palmolive (EA) Ltd	USA	Toiletries/Personal care products
Cosmic Crayon company EA Ltd	USA	Arts, Crafts and Toys
Crown Cork Company(EA) Ltd	USA	Packaging, branding
Deloitte Touche Tohmatsu	USA	Professional services
Delta Air Lines	USA	Aviation
Ecolab East Africa (K) Ltd	USA	Chemicals and chemical products
Eveready East Africa Ltd	USA	Batteries
FedEx	USA	Courier
Fidelity Bank	USA	Banking
Firestone East Africa	USA	Parts and accessories for motor vehicles
Fresh Del Monte Produce	USA	Agriculture: Juice, Fruits, Tin Cans, Poultry

General Motors	USA	Vehicle Assembly
General Electric	USA	Appliances, aviation, consumer electronics, energy, weapons, e.t.c
Google	USA	Internet, computer software
Greif Kenya Limited	USA	Machinery and equipment
IBM	USA	Computers Software and Hardware, IT Consulting and Services
MasterCard	USA	Financial Services
McCann-Erickson (Kenya) LTD	USA	Advertising
Microsoft	USA	Computer Software, Online Services and Video Games
Mobil Oil Kenya Ltd	USA	Petroleum Refinery products
Otis Elevators	USA	Elevators and Lifts
Pepsi-Cola	USA	Food and Beverage
Pfizer Laboratories Ltd	USA	Pharmaceuticals
Procter & Gamble	USA	Consumer Goods
SC Johnson & Son	USA	Consumer Goods
The Wrigley Company (EA)	USA	Confectionary/Food processing
Tibbett & Britten Kenya (Exel)	USA	Warehousing & Distribution
Qualcomm	USA	Telecommunications Equipment/semiconductors
Visa Inc	USA	Financial services
Anova East Africa (ANEA)	Netherlands	Fresh & frozen seafood products
CEVA Logistics/TNT Logistics	Netherlands	Logistics

Heineken	Netherlands	Brewery
Royal Dutch Shell	Netherlands	Petroleum Products
KLM Royal Dutch Airlines	Netherlands	Aviation
KPMG	Netherlands	Professional Services e.g. Tax Advisory, Assurance & Consulting
Phillip Medical Systems	Netherlands	Electronic Medical Equipments
Seminis Vegetable Seeds(SVS) Holland	Netherlands	Agriculture-Vegetable seeds
SERA Software East Africa	Netherlands	IT
Wec lines Ltd	Netherlands	Shipping
Alfa Laval Regional Office	Sweden	Heat Transfer, Separation and fluid handling
ABB Asea Brown Boveri Ltd	Sweden	Electrical equipment
AssaAbloy EA Ltd	Sweden	Manufacturing and services: locks, automatic and security doors
Atlas Copco Eastern Africa Ltd	Sweden	Manufacture of Compressors, Generators, Industrial tools, etc
Auto Sueco EA Ltd(Volvo)	Sweden	Heavy Equipment
Ericsson Kenya Ltd	Sweden	Telecommunications equipment
IGE Resources AB Africa	Sweden	Exploration and Mining
Ceva Animal Health Eastern Africa Ltd	Sweden	Veterinary health
Saab Automobile AB	Sweden	Automobiles, Defence and security
Sandvik (Kenya)	Sweden	Engineering: tooling, materials technology, mining and construction

Scala (EA) Ltd	Sweden	Computers-Software Services
Scania (Kenya Grange)	Sweden	Motor Vehicles
Skanska	Sweden	Construction Services
SKF (Kenya) Ltd	Sweden	Bearing manufacture
Swedfund International AB	Sweden	Financial Services and support for investments
Tetra Pak Ltd	Sweden	Integrated Processing, Packaging & Distribution Line
Ulf Ashchan Safaris	Sweden	Tourism
East African Development Bank	Uganda	Finance
Air Tanzania	Tanzania	Aviation
Achelis Group	Germany	Conglomerate
Aust-Ang Caterings limited	Germany	Hospitality
BASF	Germany	Manufacturing & Marketing of a wide range of Chemical Products
Bayer East Africa Ltd	Germany	Agricultural chemicals
Beiersdorf East Africa	Germany	Personal care
DHL	Germany	Courier
Henkel Kenya Limited	Germany	Personal care
Heidelberg East Africa	Germany	Cement
Kuehne+Nagel	Germany	Logistics
Siemens	Germany	Tele-com and Electrical Equipment
Schenker Ltd	Germany	Logistics Services

Solar World E A	Germany	Photovoltaic products/renewable energy
Weurth (Kenya) Limited	Germany	Machinery
ABB Ltd	Switzerland	Power & Automation Technologies
Airside Ltd	Switzerland	Airport services
Bata Shoes Company (K) Ltd	Switzerland	Footwear, Sportswear, Spo Equipment and toiletries
Habib Bank A G Zurich	Switzerland	Banking
Novartis (Ciba-Geigy)	Switzerland	Pharmaceuticals
Nestle Foods Kenya Limited	Switzerland	Food products, beverages, and tobacco
Private Safaris	Switzerland	Tour Companies
Roche Products	Switzerland	Pharmaceuticals
Schindler Ltd	Switzerland	Manufacture, Maintenance Modernization of Elevators Escalators
S G S Kenya Ltd	Switzerland	Custom Inspection & Valuation
Syngenta East Africa	Switzerland	Chemicals
VestergaardFrandsen	Switzerland	Public health
Yellow Wings Air Services Ltd	Switzerland	Air Charter Services
Texchem Ltd	Malaysia	Textile Chemical Products
Maersk Logistics Kenya Ltd	Denmark	Supporting transport activities
Sadolin paints(Akzo Nobel)	Denmark	Paints
Interfreight (Kenya) Limited	New Zealand	Supporting transport activities
Nokia	Finland	Tele-communications equipment,

		internet, computer software
Eltek	Norway	Electronics
United Apparels EPZ	Sri Lanka	Clothing manufacture
Unilab Kenya	Philippines	Prescription and consumer products
China Central Television (CCTV)	China	Television broadcasting
China Jiangsu International	China	Manufacturing & Exporting
China national Aero Technology Import-Export Corporation	China	Manufacture and trading Merchandise
China Overseas Engineering Corporation	China	Engineering
China Radio International	China	media
China Road & Bridge Corporation	China	Construction
Dow chemicals	China	Chemicals
Foton Motors	China	Automobiles
SIETCO Development Corporation	China	Construction
Xinhua News Agency	China	media
Air India	India	Aviation
Ashok Leyland	India	Automobiles and Engines
Bank of Baroda	India	Banking & Finance
Cadila Pharmaceuticals Ltd	India	Pharmaceutical
Chloride Exide-Emmerson, US	India	Car Batteries
Kenindia Assurance Company Ltd	India	Insurance
Manugraph Kenya Ltd	India	Printing
Marshalls EA (Tata)	India	Motor Vehicles

Praj. Industries Ltd	India	Engineering & Fabrication, Alcohol & Brewery plants
Raymond Woolen Mills (Kenya) Ltd	India	Textiles and clothing
Sher Flowers	India	Floriculture
Tata Chemicals (Magadi Soda)	India	Soda Ash mining
Tata Motors	India	Automobiles
UB Pharma Ltd	India	Pharmaceutical
Van Leer-Balmer Lwarie &Co	India	Manufacture of industrial packaging, greases and lubricants
Air Italy	Italy	Aviation
Pirelli Tyre	Italy	Tyres
Technogym	Italy	Fitness & Rehabilitation equipment
Asahi Shimbun	Japan	Media
Asami Motor Services	Japan	Motor Vehicles
Itochu Corporation	Japan	Trading Company
Kajima Corporation	Japan	General Contracting Services
Kenya Tenri Society	Japan	Foreign Development Agency
Matsushita Electrical Industrial	Japan	Electrical & Electronic components
Mitsubishi Corporation (Rep Office)	Japan	Motor Vehicles
Mitsui & Co Ltd	Japan	Widespread-Exploration Power
Nec Corporation	Japan	IT services and products
Nippon Koei Ltd	Japan	General Engineering & Consulting
Nissan (KVA)	Japan	Motor Vehicle –Urvan (Caravan)
Nissho Iwai Corporation	Japan	Heavy Construction Machinery& eqp

Overseas Courier Company	Japan	Courier Services
Sanyo Armco	Japan	Electronics & Home Appliances
Sumitomo Corporation	Japan	Widespread products
Toyota Kenya	Japan	Motor Vehicles
Daewoo Corporation	Korea	Motor Vehicles
Fila East Africa	Korea	Sports Wear
Hwan Sung Industries (Kenya) Ltd	Korea	Furniture
Hyundai Corporation	Korea	Motor Vehicles
LG	Korea	Electronics
Samsung	Korea	Electronics
Castle Brewing Kenya Ltd/SAB Miller	South Africa	Food products, beverages, tobacco
First Rand Bank	South Africa	Banking
Stanbic Bank Kenya Limited	South Africa	Finance
Steers	South Africa	Food and Beverage
Woolworths	South Africa	Retails

Source: Kenya National Bureau of Statistics Economic Survey 2007