

**SUPPLY CHAIN MANAGEMENT PRACTICES AND
PERFORMANCE OF COMMERCIAL BANKS IN KENYA**

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**A Research Project Report Submitted In Partial Fulfilment of the
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DECLARATION

This research project report is my original work and has not been presented for examination to any other university.

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This research project report has been submitted for examination with our approval as University supervisor.

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DEDICATION

This work is dedicated to Mr and Mrs Michael Ngaru.

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ABBREVIATIONS

CBK	-	Central Bank of Kenya
EDI	-	Electronic Data Interchange
EFT	-	Electronic Fund Transfer
ERP	-	Electronic Resource Planning
GSCM	-	Green Supply Chain Management
ICT	-	Information and Communication Technology
LAN	-	Local Area Networks
SCF	-	Supply Chain Finance
SCM	-	Supply Chain Management.
SME	-	Small and Medium Enterprise
VMI	-	Vendor-Managed Inventory
WAN	-	Wide Area Networks

ABSTRACT

Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement. It includes coordination and collaboration with channel partners such as suppliers, intermediaries, third-party service providers and customers. In essence, SCM integrates supply and demand management within and across companies. Organizations adopt numerous business improvement methodologies to improve their performance. As competition intensifies, so do the challenges associated with getting a product or service to the right place at the right time at the lowest delivered total cost. Service industry has begun to realize the potential benefits and importance of strategic and cooperative buyer-supplier relationships. With the purpose of managing the supply chain actions for realizing improvement in enterprise performance, it is necessary to improve the planning and management of activities such as materials planning, inventory management, capacity planning, and logistics. SCM practices in the banking industry have been unable to display consistency and stability in performance. They have frequently experienced costly discontinuities in the current dynamic markets and vastly changing technological environments. They are also inflexible and susceptible to disruption since they are unable to swiftly and suitably respond to emerging international protocols, certification requirements, and to governmental and regulatory changes. The study looked at supply chain management practices and performance of commercial banks in Kenya. Specific objectives were to: establish supply chain management practices used in the banking industry in Kenya; establish the impact of SCM to performance of the banks; and establish the challenges of supply chain management practices faced by the banking industry in Kenya. The study adopted descriptive research design in order to investigate and understand the application of supply chain management in the service industry. The population of the study was all the 43 commercial banks operating in Kenya. A semi structured questionnaire was used to collect primary data. The study used descriptive statistics to analyze objectives one and three while inferential statistics was conducted on objective two. The study found that three variables out of the six, namely Supplier Relationships, Reverse logistics, and Outsourcing were found to have strong statistically significant relationships with performance. The other three variables, namely Information Technology, Green supply chain practices and Lean Suppliers were found to have weak relationships which were not statistically significant. The study concluded that Uncertainty in terms of demand, Political interference in SCM, Bulky materials to be transported, Uncertainty in terms of supplies, Lack of financial resources and inefficient tender handling are challenges facing commercial banks in Kenya. The study recommended that commercial banks be encouraged to enhance adoption of SCM practices since they have the potential of improving their performance.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement. It includes coordination and collaboration with channel partners such as suppliers, intermediaries, third-party service providers and customers (Morgan and Monczka, 2006). In essence, SCM integrates supply and demand management within and across companies (Watts and Hahn, 2003). Slack (1995) defines procurement as the acquisition of goods, services or works from an external source at the best possible cost to meet the needs of the intended user in terms of quality and quantity, time and location. Leavy (2001) explains that there are potential risks in procurement especially when sourcing for procurement services. Outsourcing a component or service may leave a company open to opportunism, where a supplier will try to exploit it by increasing prices. Sourcing for procurement services from world class companies with their own reputation may limit this risk or it may be seen as the cost of access to skills (Leavy, 2001). Morgan and Monczka (2006) identifies logistics management as the part of SCM that plans, implements and controls the efficient, effective forward and the reverse flow of goods, services and related information between the point of origin and the point of consumption in order to meet customer requirements.

Procurement and logistics management activities as well as warehousing and distribution form SCM. According to Chandra and Kumar (2000), SCM touches major issues, including the rapid growth of multinational corporations and strategic partnerships; global expansion and sourcing; fluctuating gas prices and environmental concerns, disaster mitigation and crisis management. Each of these issues dramatically affects livelihoods, corporate strategy and the bottom line. These, among other similar contributions, qualifies for the need for SCM to be recognized as a key that can promote and increase the level of performance for service industries in Kenya.

1.1.1 Supply Chain Management Practices

Organizations adopt numerous business improvement methodologies to improve their performance. As competition intensifies, so do the challenges associated with getting a product or service to the right place at the right time at the lowest delivered total cost. Service industry has begun to realize the potential benefits and importance of strategic and cooperative buyer-supplier relationships. They have started to involve strategic suppliers in resource management decisions (Morgan and Monczka, 2006). Instead of relying on tools such as acceptance sampling to establish the quality of incoming materials and component parts, manufacturers purchase from a more limited number of qualified or certified suppliers and embrace the concept of supply base management, hoping to reduce costs by cutting inventory and improving efficiency throughout the supply chain (Watts and Hahn, 2003). In addition, organizations have come to place more emphasis on customer driven corporate policies that seek to simultaneously pursue objectives of customer satisfaction, quality and productivity improvement, and cost reduction.

SCM practices have received numerous other definitions. Koh, Demirbag, Bayraktar, Tatoglu, and Zaim (2007) defined SCM practice as the set of activities undertaken by an organization to promote effective management of its supply chain; as the approaches applied in integration, managing and coordination of supply, demand and relationships in order to satisfy clients in an effective way; as tangible activities/technologies that have a relevant role in the collaboration of a focal firm with its suppliers and/or clients; and as the approach to involve suppliers in decision making, encouraging information sharing and looking for new ways to integrate upstream activities. As a consequence, it involves developing customer contacts by customer feedback to integrate the downstream activities and delivering orders directly to customers (Chow et al., 2008). The concepts and practices of SCM have been touted as improving the performance of organizations who participate in them.

The supply chain management in general aims at improving value delivery to customers; relying on just-in-time system; eliminating waste; getting the involvement of all

stakeholders in the value creation process as well as working closely with suppliers. According to Ireland and Webb (2007), SCM continues to be adopted by organizations as the medium for creating and sustaining a competitive advantage and points out that such a displacement is understandable considering the potential benefits of successful supply chain management. These benefits attributed to supply chain management include inventory reduction, improved delivery service, and shorter product development cycles. On their part, Slack et al., (1995) observed that the objectives of supply chain management include focusing in satisfying end customers, to formulate and implement strategies based on capturing and retaining end-customer business and also to manage the whole chain effectively and efficiently. SCM is one of the most effective ways for firms to improve their performance (Ou et al., 2010).

With the purpose of managing the supply chain actions for realizing improvement in enterprise performance, it is necessary to improve the planning and management of activities such as materials planning, inventory management, capacity planning, and logistics (Chandra and Kumar, 2000) with suppliers and clients. The simultaneous integration of customer requirements, internal processes, and upstream supplier performance is commonly referred to as supply chain management (SCM). Supply chain management (SCM) is an integrated approach beginning with planning and control of materials, logistics, services, and information stream from suppliers to manufacturers or service providers to the end client; it represents a most important change in business management practices (Ou et al., 2010). SCM is one of the most effective ways for firms to improve their performance. With the purpose of managing the supply chain actions for realizing improvement in enterprise performance, it is necessary to improve the planning and management of activities such as materials planning, inventory management, capacity planning, and logistics with suppliers and clients.

Supply chain practices cannot on their own improve efficiencies individually, since the efficiency can be achieved through the interaction of various supply chain practices. Kaufman (2002) point that, for effective SCM, a comprehensive effort for improvement in all of supply chain functions within a firm should be made, and, first of all, the focus

of supply chain practices should shift from functional and independent to general and integrative. 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 SC integration can be possible by the systematic utilization of various supply chain practices. Bowersox (2009) also have the same perspective with the above argument.

1.1.2 Supply Chain Performance

Companies must always be concerned with their competition. Today's marketplace is shifting from individual company performance to supply chain performance: the entire chain's ability to meet end-customer needs through product availability and responsive, on-time delivery. Supply chain performance crosses both functional lines and company boundaries. Functional groups (engineering/R&D, manufacturing, and sales/marketing) are all instrumental in designing, building, and selling products most efficiently for the supply chain, and traditional company boundaries are changing as companies discover new ways of working together to achieve the ultimate supply chain goal: the ability to fill customer orders faster and more efficiently than the competition.

1.1.3 Banking Industry in Kenya

The banking industry in Kenya is consisted of 45 licensed institutions to carry out the business of financial intermediation. They are guided by prudential guidelines issued by the Central Bank of Kenya. Of the 45 institutions, 2 are mortgage finance companies and one is non-bank financial institution. The sector has 35 financial institutions locally owned and 10 are foreign owned. The 3 locally owned banks (National bank of Kenya, Co-operative Bank of Kenya and Kenya Commercial Bank) have significant government shareholding (Felix, 2009).

Kenya's banking industry has seen a significant improvement in asset quality over the past years, mostly due to loan write-offs and recapitalization of government-owned banks, has mostly well capitalized and liquid banks and, overall, the industry is resilient

to shocks. Interest rate spreads have decreased over the past years, a phenomenon mostly accounted for by foreign banks and the reduction in overhead costs they experienced. Outreach is still limited, but has improved over the past years, with M-Pesa having a significant impact in the domestic remittance market (Beck and Fuchs, 2004).

The current adverse global environment underlines the need for continuing sound micromanagement and for deepening institutional reform. Consolidation across Kenyan banks might possibly lead to efficiency and stability gains, an effect, however, that depends on the implications of concentration, ownership for competition and an integrated effective Supply Chain management (SCM) practices. While there are no obvious negative repercussions for outreach of the banking industry, the consolidation of niche banks might result in reduction of services for clients in these niches (Beck, 2009). Critically, the effect of consolidation will depend on the future of the government-owned banks and quality improvements in financial infrastructure, including the contractual framework and the credit registry that is to be established.

Supply Chain Finance (SCF) aims to improve the financial efficiency of the supply chain and substantially reduce the working capital of both buyers and suppliers. It allows buyers to extend payment terms while providing suppliers access to better financing rates (Beck, 2009). It creates a true win-win for all the parties involved as one of the most attractive tools for companies to diversify funding sources, enrich and solidify the relationships with their trade partners.

1.2 Statement of the Problem

Over the past decade, there has been an increasing emphasis on supply chain management as a vehicle through which firms can achieve competitive advantage in markets, improve efficiency and enhance service delivery (Collin, 2003). A large number of examples in the 1990s show how companies have made large investments to streamline their supply chains in order to improve customer satisfaction and increase their internal productivity. As Christopher (1998) states, it is not actually individual companies that compete with each other nowadays; rather, the competition is

between rival supply chains. The supply chains that add the most value for customers with the lowest cost in the chain make up the winning network of individual companies. As companies are now seeking how to integrate critical success factors in the supply chain management across supply chain functions, across geographically dispersed facilities, and across time, the facts based supply chain management is crucial (Shapiro, 2001).

SCM practices in the banking industry have been unable to display consistency and stability in performance. They have frequently experienced costly discontinuities in the current dynamic markets and vastly changing technological environments. They are also inflexible and susceptible to disruption since they are unable to swiftly and suitably respond to emerging international protocols, certification requirements, and to governmental and regulatory changes (Collin, 2003). The absence of adequate standards and protocols in the banking industry, most notably, directly affects the quality of service delivery. Kenya's banking industry is large and supply chain management practices can help the industry increase and make it sustainable, profitable, enhance service delivery, improve efficiency and build competitive advantage.

There are a number of studies done on supply chain management. For instance, a study by Zailani and Rajagopal (2011) concluded that application of SCM enables companies to perform well, however their findings are limited to the public and private sector organizational performance. McAdam and McCormack (2001) also concluded that businesses are gaining competitive advantage by maximizing the efficiency of their "global" supply chains. The study does not however consider efficiencies within the service industry. Monczka and Morgan (2005) investigated the supply chain management practices among the Indonesian banking sector. They found that the sector had not institutionalized a collaborative relationship with its suppliers and suggested that effective communication, continuous improvement and competitiveness be institutionalized in chain management. Similar study is useful in the Kenyan banking industry.

Kangogo (2012) in his study of Supply Chain Distribution in the floriculture industry in Kenya found out that natural disasters are the highest causes of supply chain disruption in the Kenya floriculture industry. Moenga (2011) carried out a study to establish the supply chain management practices and challenges and found that though small scale tea sector in Kenya believes in strong and stable relationships with its suppliers, the reality is completely different. Abdifatah (2012) carried out a study on Supply chain management practices and their impact on performance among humanitarian organizations in Kenya and found that effective supply chain management enhances performance of organizations. Omwenga (2007) carried out a study on Kenya's competitiveness in the floriculture industry and found that Kenya's flowers are competitive in the global market and that this can be attributed to factor conditions, the investment friendly Kenyan culture and good climate, government policy, supporting local organizations and the deliberate involvement of flower firms in marketing and corporate strategies. There is no study that has looked at SCM practices in the Kenyan banking industry. This research therefore sought to investigate application of supply chain management practices in the banking industry in Kenya. The research questions for the research were: What is the level of adoption of supply chain management practices in the banking industry? What are the challenges of supply chain management practices faced by the banking industry in Kenya? What is the influence of supply chain management practices in the banking industry?

1.3 Research Objectives

The main objective of the study was to investigate supply chain management practices and performance of commercial banks in Kenya.

The specific Objectives were:

- i. To establish supply chain management practices used in the banking industry in Kenya.
- ii. To establish the impact of SCM to performance of the banks.

- iii. To establish the challenges of supply chain management practices faced by the banking industry in Kenya.

1.4 Value of the Study

The investors and managers in the banking industry can benefit from insights into what it takes the industry to thrive and how to leverage the supply chain management practices in the country to their advantage.

Government Institutions and industry associations can find the information useful by identifying the weaknesses in supply chain management in the banking industry and come up with possible solutions that will enhance the effective supply chain in the banking industry.

The study stands to benefit researchers, scholars and academicians interested in the subject of supply chain management and indeed contribute to the body of knowledge in the subject.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter provides a review of literature on topics related to the research problem. It examines what various scholars and authors have presented about the concept of supply chain management practices. The chapter covers concept of supply chain management practices, effect of supply chain management practices, empirical studies.

2.2 Supply Chain Management

The simultaneous integration of customer requirements, internal processes, and upstream supplier performance is commonly referred to as supply chain management (SCM). While SCM has become popular, there are in practice few examples of truly integrated supply chains (Handfield and Nichols, 2008). Although the literature is replete with reports of firms that developed strategic supplier-buyer partnerships, outsourced non-core competencies, and adopted strategic customer relations practices, few companies have succeeded simultaneously on all these fronts. Scott and Westbrook (1991) describe supply chain management as the chain linking each element of the manufacturing and supply process from raw materials through to the end user, encompassing several organizational boundaries. Thus, SCM encompasses the entire value chain and addresses materials and supply management from the extraction of raw materials to the end of its useful life. It aims at improving value delivery to customers; relying on just-in-time system; eliminating waste; getting the involvement of all stakeholders in the value creation process as well as working closely with suppliers.

2.3 Supply Chain Management Practices

SCM practices are defined as the set of activities undertaken by an organization to promote effective management of its supply chain (Koh et al., 2007); such as the approaches applied in integration, managing and coordination of supply, demand and relationships in order to satisfy clients in an effective way as tangible activities/technologies that have a relevant role in the collaboration of a focal firm with

its suppliers and/or clients and as the approach to involve suppliers in decision making, encouraging information sharing and looking for new ways to integrate upstream activities. As a consequence, it involves developing customer contacts by customer feedback to integrate the downstream activities and delivering orders directly to customers (Chow et al., 2008).

The choice of suppliers and how businesses are effectively integrated to obtaining proper complementary skills are important issues. Strategic sourcing consists of strategic outsourcing and supplier capability analysis. In addition, the construct strategic supplier partnership is an integral element to the second order construct of SCM (Li et al., 2006). The defining elements of strategic sourcing have been identified to be the status of supply management within the organizational hierarchy, internal coordination of supply management with other functions in a firm, active information sharing with suppliers, and comprehensive supplier development activities (Kocabasoglu and Suresh, 2006). In the retail category management context, strategic sourcing has also been found to influence knowledge creation and sharing among suppliers and retailers (Dewsnap and Hart, 2004). Since suppliers and retailers have knowledge in different domains, the combination can create unique knowledge that can be applied to improve business knowledge. Better relationships between retailers and their suppliers also improve prospects of new product acceptance (Kaufman, 2002).

Global competition and accelerating technological changes especially in information and communication and internet technologies makes competition knowledge-based thereby affecting SCM across firms (Lang, 2001). A stronger emphasis on knowledge management as part of organizational strategy may help supply managers to manage uncertainty better. It is observed that establishment of internal knowledge management systems for organizations create a greater base for tacit learning to be leveraged. On the other hand, external knowledge management brings value chain members closer together and adds value to the product through increased quality and customer perception of brand platforms. Koh and Tan, (2006) assert that it is only knowledge management that is inadequate in many ways for managing a supply network in uncertain environment hence

a new approach is needed. They linked the impact of organizational structure in knowledge transfer and utilization among the different participating functions in the perceptiveness of systems theory. Information sharing practices such as vendor-managed inventory give manufacturers access to more accurate demand information such as customer sales data than before.

Reverse logistics is defined as the effective and efficient management of the series of activities required to retrieve a product from a customer in order to either dispose of it or recover value (Defee et al., 2009). On the other part, Lang (2001) defined reverse supply chain as “the process of planning, implementing and controlling the efficient, cost-effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing or creating value or for proper disposal”. Firm control has been recognized as a crucial component of SCM. Lang (2001) noted that the first step is to introduce structure and discipline to the supply process, tightening up procedures, and taking control of all activities in the supply chain. An important way to introduce structure is to formalize logistics operations.

The Green Supply Chain Management (GSCM) concept (and its many elements) has had many variations over the years and has included sustainable supply network management; supply and demand sustainability or corporate social responsibility networks; supply chain environmental management; green purchasing and procurement, environmental purchasing, green logistics and environmental logistics (Smaros et al., 2003). Using a similar premise, Vachon and Klassen (2006) put forward the concept of green supply chain practices which comprise two sets of related yet independent environmental activities, namely: environmental collaboration and environmental monitoring. On the basis of the same construct as stated by Vachon and Klassen (2006), an organization’s green supply chain practices imply internalizing by integrating its environmental management activities with other organizations in the supply chain or externalizing environmental management in the supply chain by employing market-based mechanisms.

2.4 Challenges of Supply Chain Management Practices

Awad and Nassar (2010) explain that world markets are moving towards globalization, thus making it difficult for organizations to cut costs and integrate their SCM processes internationally. They further state during the industrial age, companies would look for new markets and production processes but now they look for economies of scale. It is difficult for organizations to rely solely on SCM integration to cut costs because it is not easy to integrate different supply chains systems globally or internationally, hence making, globalization a challenge for SCM integration.

While SCM is a significant part of organizational operational strategies, it is important to note that for different organizations to fully integrate their SCM, they have to make sure that their operations are flexible enough to allow for this integration. Karkkainen and Ala-Risku (2003) state that each and every organization has an organizational culture that is unique.

SCM integration may call for the need to change everything such as the structure, the values, the mission, strategy and relationships, one of the most difficult challenges that confront every corporation. Boxall (1992) explains that customer needs and wants have become dynamic as well as diverse. The basic purpose of a SCM strategy is to identify and satisfy the needs and wants of customers effectively and efficiently, but when they continuously change, it makes it difficult to integrate SCM for a longer period of time as market dynamics also change rapidly, hence SCM integration may seem like a short term orientation.

2.5 Factors Influencing Supply Chain Management Practices

Environmental uncertainty Influences Supply Chain Practices in the product chain (Dwivedi and Butcher, 2009). Ettlie and Reza (1992) described this as the unexpected changes of customer, supplier, competitor, and technology. It was said by Yusuf (1995) that government support plays an important role for business success. Paulraj and Chen (2007) mentioned that environmental uncertainty is an important factor in the realization of strategic supply management plans. The increase of outsourcing activities in the

industry had augmented the awareness of the importance of strategic supply management, which leads to better relationship among organizations. Under this factor, three sub-factors were identified: environment, government support, and uncertainty aspects from overseas.

The level of support that the company receives from the government when importing raw materials or products from overseas or using domestic materials is of great influence. It includes the use of norms, regulations, policies, and advice for the sector. The research conducted by Elzarka et al., (2011) describes how government can make a series of reforms to encourage exports by increasing manufacturing sector's competitiveness in the international market through logistics competency. The increase of international trade for acquiring resources from other countries introduces complicated matters such as language barriers, transportation, transportation costs, exchange rates, tariffs, and administrative practices (Quayle, 2006).

When requiring the outsourcing of raw materials or products, it is important to acknowledge the existence of environmental factors such as political uncertainties in other countries that can increase risk for suppliers, provoke decisions of no investment, change business strategies, and in general influence business decisions. Social uncertainties such as religion, environment, language, cultural issues, limitations of communication (Bhattacharyya et al., 2010) and also the technology used in other countries might interfere with supply chain planning and function (Bized, 2007).

Telecommunications and computer technology allow all the actors in the supply chain to communicate among each other. The use of information technology allows suppliers, manufacturers, distributors, retailers, and customers to reduce lead time, paperwork, and other unnecessary activities. It is also mentioned that managers will experience considerable advantages with its use such as the flow of information in a coordinated manner, access to information and data interchange, improved customer and supplier relationships, and inventory management not only at the national level but also internationally (Handfield and Nichols, 1999). Also the advantages will include supply contracts via internet, distribution of strategies, outsourcing and procurement (Simchi-

Levi et al., 2003). All companies are looking for cost and lead time reductions with the purpose of improving the level of service but also to enhance inter-organizational relationships (Humphreys et al. 2001).

Communication tools are used to facilitate data transfer and communication between the trading parts and this might include EDI, electronic fund transfer (EFT), intranet, internet, and extranet (Li 2002). Electronic Data Interchange (EDI) is used for procurement. EDI serves as electronic catalogs for customers who can get information, dimensions, and cost about a specific product. EFT provides trading partners with an effective way to transfer funds from one account to another through a value added network (VAN) or the internet. Intranets are corporate local area networks (LAN) or wide area networks (WAN) that communicate through the internet and are secured by firewalls. Usually this type of communication tool is used inside a corporation that features different locations. On the other hand, extranet allows business to communicate and share business with external collaborators with a certain degree of security and privacy.

2.6 Relevant Theories to Research

2.6.1 Competitive Advantage Theory

Competitive advantage occurs when an organization acquires or develops an attribute or combination of attributes that allows it to outperform its competitors. Competitive advantage is based on theory that seeks to address some of the criticisms of comparative advantage. Michael Porter proposed the theory in 1985. Competitive advantage theory suggests that states and businesses should pursue policies that create high-quality goods to sell at high prices in the market. Porter emphasizes productivity growth as the focus of national strategies. Competitive advantage rests on the notion that cheap labor is ubiquitous and natural resources are not necessary for a good economy. The other theory, comparative advantage, can lead countries to specialize in exporting primary goods and raw materials that trap countries in low-wage economies due to terms of trade. Competitive advantage attempts to correct for this issue by stressing maximizing scale

economies in goods and services that garner premium prices (Scott and Westbrook, 1991).

The term competitive advantage is the ability gained through attributes and resources to perform at a higher level than others in the same industry or market (Chacarbaghi and Lynch, 1999). The study of such advantage has attracted profound research interest due to contemporary issues regarding superior performance levels of firms in the present competitive market conditions.

2.6.2 Systems Theory

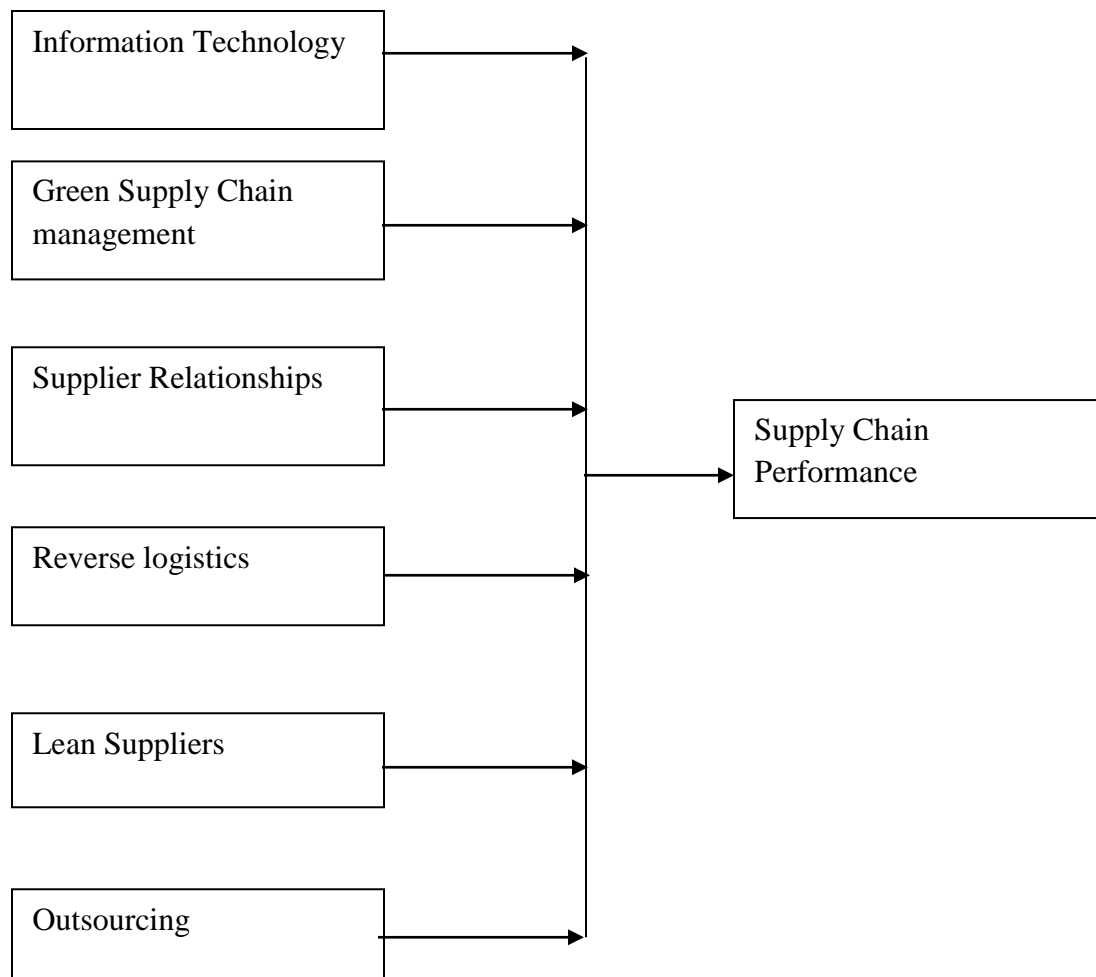
Theory can be defined as a coherent group of general propositions that are used as principles to explain some class of phenomena. A system is an integration of elements that function together for the purpose of achieving some objective. Systems theory, therefore, uses system structure as a means of explaining phenomena. Systems theory was first applied to science. In 1956, economist Boulding advocated a general systems theory as the skeleton of science “on which to hang the flesh and blood of particular disciplines.” Systems theory was then applied to business very broadly, and then gradually refined to focus on management in general, and then on such business areas as manufacturing and marketing. The theory offers the potential of providing a framework for organizing the various supply chain functions and providing a mechanism for a systematic approach to solving supply chain problems.

2.6.3 Supply and Demand Theory

The theory behind the supply and demand model is contingent on the idea that in a free market economy, the amount of an item that the producer supplies and the amount that the customer demands both depend on the item’s market price. According to the law of supply, supply and price are proportional – the higher an item’s price, the more will be supplied by the producer. According to the law of demand, demand is inversely proportional to price – so the higher an item’s price, the less demand there will be among customers. Hence, both supply and demand vary according to the price.

Economic theory holds that demand consists of two factors: taste and ability to buy. Taste, which is the desire for a good, determines the willingness to buy the good at a specific price. Ability to buy means that to buy a good at specific price, an individual must possess sufficient wealth or income. Both factors of demand depend on the market price. When the market price for a product is high, the demand will be low. When price is low, demand is high. At very low prices, many consumers will be able to purchase a product. However, people usually want only so much of a good. Acquiring additional increments of a good or service in some time period will yield less and less satisfaction.

2.7 Conceptual Framework



Source: Author (2014)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the research methodology proposed for this study. It covers the research design, target population, sample design, data collection methods and the proposed data analysis and techniques.

3.2 Research Design

The study adopted descriptive research design in order to investigate and understand the application of supply chain management in the service industry. This research design is preferred because it allows prudent comparison of the research findings. Qualitative approach was used in order to gain a better understanding and possibly enable a better and more insightful interpretation of the results from the quantitative study.

3.3 Target Population

The population of the study was all the commercial banks operating in Kenya. There are 43 commercial banks operating in Kenya (Central bank of Kenya annual reports, 2013).

3.4 Data Collection

A semi structured questionnaire were used to collect primary data. Before administering questionnaires, the researcher will ask for permission from the management. The questionnaires were then administered to those who work within Nairobi and sent to those who work outside Nairobi. The study targeted 1 manager from supply chain department in each bank. The questionnaire was divided into two parts: Part A, gathered information about the responding organizations' general information and Part B, gathered information according to the research questions.

3.5 Data Analysis

Data was arranged and analyzed using descriptive statistics. It presented the findings in form of a mean, percentages and frequency tables. Descriptive statistics provides simple summaries of the respondents and the observations that have been made. Data which was obtained from Likert scale was used to calculate the mean of the supply chain management practices adopted by the banks.

In order to establish the effect of SCM practices and the performance of commercial banks in Kenya, the study conducted inferential statistics on SCM variables against performance. The researcher therefore performed a regression analysis to establish the association between the independent variables (IT, GSCM, Supplier relationships, Reverse logistics, Lean Suppliers and Outsourcing) with the dependent variable (performance). The regression equation was:

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \varepsilon$$

Where:

Y = Supply Chain Performance

α_0 = Constant

X1 = Information Technology

X2 = Green Supply Chain management

X3 = Supplier Relationships

X4 = Reverse logistics

X5 = Lean Suppliers

X6 = Outsourcing

ε = Error term

CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the data analysis and interpretation of results on the application of supply chain management practices in the banking industry. Data was collected from Procurement Managers in all the 43 commercial banks of Kenya. Descriptive statistics was done in order to describe variables under study. Inferential statistics was done to show the correlations and relationship between variables.

4.2 General Information

Out of 43 targeted respondents, only 38 responded which constituted 88% of the sample. The response rate of 88% was considered sufficient to yield meaningful statistical analysis. The respondents who did not respond gave various reasons including sensitivity of information requested; few procurement managers released information, while others feared misuse of the information requested.

The study asked respondents about their personal profile. This was to determine their ability in answering the questions. The study asked questions on gender, age, highest level of education, duration served in the organization and management level.

The researcher sought to determine the ages of the respondents. From the findings, 63.3% were male while 36.7% were female implying that the gender distribution of procurement managers at commercial banks in Kenya is not evenly distributed.

The study sought to determine the age of the respondents. From the findings, majority of the respondents (55%) were aged between 20-29 years, (19%) between 40-49 years and (16%) between 30-39 years. This shows that majority of the respondents were mature with appropriate work experience and therefore they were well versed with relevant information on supply chain management which was needed for the study.

The study sought information about the level of education of the respondents. Findings revealed that a greater proportion of the respondents (52%) had Bachelor's degree, (32%) had Master Degrees, this suggests that the respondents were well conversant with the issues relating to Supply chain management practices in the banking sector and therefore they gave accurate and relevant information needed for the study.

The study requested respondents to indicate their duration of service in the banking industry. From the findings, majority of the respondents (49%) had worked in the banking industry for a period of 6 – 10 years, (27%) for more than 11 years, (21%) for 2 – 5 years and (3%) for less than 2 years. It can be established that majority of the respondents had worked for their banks between a period of 6-10 years hence had knowledge about procurement practices in the banking industry.

The study requested respondents to indicate their current management level. All the respondents indicated that they are in top management level. This shows that they were well conversant and had access to information about procurement practices and bank performance.

4.3 Adoption of Supply Chain Management Practices

The study in this section sought information about the level of adoption of supply chain management practices in the banking industry. With regard to supply chain management practices, the study requested respondents to rate the extent to which they have adopted and used procurement practices in their banks. Table 4.1 presents the findings.

Table 4.1: Level of Adoption of Supply Chain Management Practices

	Mean	Standard Deviation
Green Supply Chain Management Practices	4.73	0.785
Existence of environmental policy	4.68	0.563
Reverse logistics	4.61	0.784
Reduction of fuel consumption	4.54	1.045
Collaboration with Suppliers on long term relationships	4.43	0.243
Preparation of specifications with Suppliers	3.34	0.831
Real time delivery	3.23	1.763
Integrated information technology	2.64	0.634
Existence of a supply chain data base	2.48	0.843
Free Flow of information among members of staff and suppliers	2.46	0.753
Sharing of Information with Suppliers	2.43	0.536
Supplier Selection and evaluation	2.15	0.132
Outsourcing	1.87	0.216
Lean Suppliers/Supply base reduction	1.42	0.293

From the findings, majority of the respondents were in agreement that collaboration with Suppliers on long term relationships is well adopted and used by the banks having a mean

score of 4.73. Preparation of specifications with Suppliers had a mean score of 4.68, Existence of a supply chain data base (M=4.61), Integrated information technology (M=4.54) and Existence of environmental policy (M=4.43). Few respondents agreed that Supplier Selection and evaluation, Outsourcing and Sharing of Information with Suppliers have been well adopted by banks having low mean scores of 1.42, 1.87 and 2.15 respectively. The findings indicate that commercial banks in Kenya have adopted collaboration with suppliers on long term relationships, preparation of specifications with suppliers, existence of a supply chain data base, integrated information technology and existence of environmental policy.

4.5 Challenges of Supply Chain Management Practices

The study sought information about the challenges of SCM practices. It requested respondents the extent their organizations face difficulties during the adoption of SCM practices. Findings are presented in table 4.2

Table 4.2: Challenges of Supply Chain Management Practices

	Mean	Standard Deviation
Political interference in SCM	4.77	0.943
Bulky materials to be transported	4.60	0.831
Lack of financial resources	4.23	0.954
Inefficient tender handling	4.13	1.945
Special materials to be transported	3.44	1.053
Uncertainty in terms of demand	4.78	0.564
Uncertainty in terms of supplies	4.56	0.763
Not paying suppliers	2.43	0.673
Poor order request form filling	3.42	0.645
Lack of top management support	3.42	0.784
Lack of qualified personnel	2.28	0.674
Poor infrastructure	1.54	0.495

From the findings, the major challenges that were identified by the respondents include: Uncertainty in terms of demand (M=4.78), Political interference in SCM (M=4.77), Bulky materials to be transported (M=4.60), Uncertainty in terms of supplies (M=4.56), Lack of financial resources (M=4.23) and Inefficient tender handling (M=4.13). Poor infrastructure (M=1.54), Lack of qualified personnel (M=2.28) and Not paying suppliers (M=2.43) were considered as the least supply chain management challenges at the

banking sector. The findings indicate that Uncertainty in terms of demand, Political interference in SCM, Bulky materials to be transported, Uncertainty in terms of supplies, Lack of financial resources and inefficient tender handling are challenges facing banks in Kenya.

4.6 Influence of Supply Chain Management Practices

The study sought to determine the influence of supply chain management practices at the banks. Table 4.3 presents influence of information technology.

Table 4.3: Information Technology

Information Technology	Mean	Standard Deviation
There is effective automated ordering system in the organization	4.58	1.11
Information exchange between our suppliers and us is timely	2.96	0.76
IT systems is adequate in the supply chain	3.54	1.14
There is accurate information between suppliers and us	2.98	1.03
Data is easily shared between suppliers and us	4.43	1.09

From the findings, majority of the respondents (M=4.58) agreed that there is effective automated ordering system in the organization and that data is easily shared between suppliers and us (M=4.43). On Green Supply Chain management, the study found that majority of the respondents agreed that staff are able to determine goods that are environmentally friendly (M=4.32), Suppliers are informed of the need to supply

recyclable goods (M=4.21) and the environmental policy has been fully implemented within the organization (M=4.00) as shown in table 4.4 below. The findings indicate that

Table 4.4: Green Supply Chain management

Green Supply Chain management	Mean	Standard Deviation
Staff are able to determine goods that are environmentally friendly	4.32	1.07
Suppliers are informed of the need to supply recyclable goods	4.21	1.01
The environmental policy has been fully implemented within the organization	4.00	0.9
Suppliers have adhered to supply of environmental friendly goods	3.98	0.56
Staff are sensitized on environmental awareness	3.23	1.14

On Supplier Relationships, the study found that respondents were in agreement that we frequently interact with suppliers to set standards (M= 4.74), and that we frequently measure and evaluate supplier satisfaction (M=4.25) as shown in table 4.5

Table 4.5: Supplier Relationships

Supplier Relationships	Mean	Standard Deviation
Suppliers deliver goods prior to payment	2.42	0.89
We frequently interact with suppliers to set standards	4.74	0.46
We frequently measure and evaluate supplier satisfaction	4.25	1.09
Suppliers are part of the organization	3.87	0.9
We conduct Joint team building activities with our suppliers	3.78	1.16

On reverse logistics, majority of the respondents were in agreement that the study found that services/products are distributed to customers with a mean score of 4.78, there is increased capacity to offer services to customers (M=4.12) and that customers receive goods and services at the right time (M=3.43) as shown in table 4.6

Table 4.6: Reverse logistics

Reverse logistics	Mean	Standard Deviation
Customers receive goods and services at the right time	3.43	0.71
There is Increased capacity to offer services to customers	4.12	0.9
There exists a vehicle maintenance policy	3.13	0.87
Surplus items are sold and there is reuse of recyclable products	3.35	0.69
Services/products are distributed to customers	4.78	0.564

The study on lean suppliers found that respondents agreed that there are manageable suppliers, quality goods are delivered by suppliers, suppliers understand what the bank needs and there is equal chance in tendering process with standard deviation of 4.77, 4.6, 4.23 and 4.13 respectively as seen in table 4.7

Table 4.7: Lean Suppliers

Lean Suppliers	Mean	Standard Deviation
There are manageable suppliers	4.77	0.943
Quality goods are delivered by suppliers	4.6	0.831
Suppliers understand what the bank needs	4.23	0.954
There is equal chance in tendering process	4.13	1.945
There is a short lead time of service delivery	3.44	1.053

Lastly, the study looked at outsourcing and found that respondents agreed there is quality in outsourced services, there is improvement on service delivery and supplier and customer meet regularly to discuss quality of outsourced services with mean scores of 4.56, 3.42 and 3.42 respectively as shown in table 4.8

Table 4.8: Outsourcing

Outsourcing	Mean	Standard Deviation
There is quality in outsourced services	4.56	0.763
Cost cutting has been seen on outsourced services	2.43	0.673
There is improvement on service delivery	3.42	0.645
Supplier and customer meet regularly to discuss quality of outsourced services	3.42	0.784

4.7 Supply Chain Performance

The study south information on how SCM practices affects performance. Table 4.9 presents the findings.

Table 4.9: Supply Chain Performance

	Mean	Standard Deviation
Lower inventory days of supply	3.98	0.56
Accurate fulfilment of orders	1.74	0.46
Reduced cost of sales	3.54	1.14
SCM has led to faster supply chain response time	4.43	1.09
There is good line item fill rate	2.96	0.76
There is value addition on products	4.58	1.11
There is timely delivery of products	2.98	1.03

Majority of the respondents were in agreement that there is value addition on products (M=4.58) and that SCM has led to faster supply chain response time (M=4.43). Few respondents agreed that accurate fulfilment of orders (M=1.74) and that there is good line item fill rate (M=2.96).

4.8 The relationship between Supply Chain Management Practices and Performance

The study sought to investigate the relationship between the supply chain management practices adopted by banks and their performance. The variables were all measured using a 5-point likert scale. Table 4.10 presents the correlation analysis.

Table 4.10: Correlation Analysis

Dimension	Y	X1	X2	X3	X4	X5	X6
Y	1.000						
X1	0.127	1.000					
X2	-0.131	0.115	1.000				
X3	0.016	0.012	0.122	1.000			
X4	0.121	0.297	0.294	0.290	1.000		
X5	-0.037	0.146	0.165	0.083	0.145	1.000	
X6	0.242	0.201	0.236	0.261	0.174	0.047	1.000

Y = Performance

X1= Information Technology

X2= Green Supply Chain management

X3= Supplier Relationships

X4= Reverse logistics

X5= Lean Suppliers

X6= Outsourcing

The greatest correlations are between Reverse logistics and Information Technology; Reverse logistics and Green Supply Chain management with correlations of 0.297 and 0.294. However, the study also found negative correlations between Green Supply Chain management and performance and Lean Suppliers with performance having correlation coefficients of -0.131 and -0.037. The correlation test shows that there is a positive relationship between four independent variable (Information Technology, Supplier Relationships, Reverse logistics and Outsourcing) and dependent variable (supply chain performance).

Table 4.11 shows the model summary

Table 4.11: Model summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.798a	.637	.598		0.42620

a Predictors: (Constant), Supply Chain Performance

From the table above, the coefficient of determination was found to be .637 indicating that SCM practices account for 63.7% of the variability in performance. This represents a

good fit since the rule of thumb has it that an R-square between 60% and 69% represents a good model.

Table 4.12 presents the ANOVA results

Table 4.12: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.986	6	2.998	16.503	.000b
	Residual	4.178	23	.182		
	Total	22.164	29			

a Dependent Variable: Supply Chain Performance

b Predictors: (Constant), Information Technology, Green Supply Chain management, Supplier Relationships, Reverse logistics, Lean Suppliers and Outsourcing

From the table above, the F-statistic was 16.503 with a P-value of 0.000 which is less than .05. This indicates that the model was statistically significant at the 5% level of significance implying that SCM practices have a statistically significant relationship with performance.

Table 4.13 presents coefficients estimates

Table 4.13: Coefficients Estimates

Model		Unstandardized		Standardized		t	Sig.
		Coefficients		Coefficients			
		B	Std. Error	Beta			
1	(Constant)	.175	.271			.647	.524
	X1	.014	.049	.019		.279	.783
	X2	-.024	.077	-.025		-.309	.760
	X3	.380	.083	.474		4.586	.000
	X4	.273	.063	.323		4.319	.000
	X5	-.069	.063	-.069		-1.090	.287
	X6	.379	.081	.370		4.694	.000

a Dependent Variable: Supply Chain Performance

The model was:

$$Y = \alpha_0 + \alpha_1 X1 + \alpha_2 X2 + \alpha_3 X3 + \alpha_4 X4 + \alpha_5 X5 + \alpha_6 X6 + \varepsilon$$

Where: Y = Supply Chain Performance; α_0 = Constant; X1 = Information Technology; X2 = Green Supply Chain management; X3 = Supplier Relationships; X4 = Reverse logistics; X5 = Lean Suppliers; X6 = Outsourcing ε = Error term

The resulting equation was as follows

$$Y = .175 + 0.014X_1 - 0.024X_2 + 0.380X_3 + 0.273X_4 - 0.069X_5 + 0.379X_6$$

From the table above, information technology has a weak positive relationship with performance but the relationship is not statistically significant at the 5% significance level ($p = 0.783 > 0.05$). Green Supply Chain management has a negative relationship with performance but the relationship is not statistically significant at the 5% significance level ($p = 0.760 > 0.05$). Supplier Relationships however has a positive relationship with performance which is statistically significant at the 5% significance level ($p = 0.000 < 0.05$). Reverse logistics also has a positive correlation which is statistically significant at the 5% significance level ($p = 0.000 < 0.05$). Lean Suppliers was found to have a negative relationship with performance but the relationship was not statistically significant ($p = 0.287 > 0.05$). Finally, Outsourcing was found to have a positive and statistically significant relationship at 5% level of significance with performance ($p = 0.000 < 0.05$).

4.9 Discussion of Findings

The study found that that commercial banks in Kenya chose and adopted collaboration with suppliers on long term relationships, preparation of specifications with suppliers, existence of a supply chain data base, integrated information technology and existence of environmental policy. The study found that Information Technology influences bank performance. It found that effective automated ordering system in the organization makes data to be easily shared between suppliers hence influencing bank performance. Social

uncertainties such as religion, environment, language, cultural issues, limitations of communication (Bhattacharyya et al., 2010) and also the technology used in other countries might interfere with supply chain planning and function (Bized, 2007).

On Outsourcing, the study found that respondents agreed there is quality in outsourced services, there is improvement on service delivery and supplier and customer meet regularly to discuss quality of outsourced services. Paulraj and Chen (2007) mentioned that environmental uncertainty is an important factor in the realization of strategic supply management plans. The increase of outsourcing activities in the industry had augmented the awareness of the importance of strategic supply management, which leads to better relationship among organizations. The level of support that the company receives from the government when importing raw materials or products from overseas or using domestic materials is of great influence. It includes the use of norms, regulations, policies, and advice for the sector.

The study found that uncertainty in terms of demand, Political interference in SCM, Bulky materials to be transported, Uncertainty in terms of supplies, Lack of financial resources and inefficient tender handling as the challenges facing banks in Kenya. Awad and Nassar (2010) explain that world markets are moving towards globalization, thus making it difficult for organizations to cut costs and integrate their SCM processes internationally. It is difficult for organizations to rely solely on SCM integration to cut costs because it is not easy to integrate different supply chains systems globally or internationally, hence making, globalization a challenge for SCM integration. Boxall (1992) explains that customer needs and wants have become dynamic as well as diverse.

The basic purpose of a SCM strategy is to identify and satisfy the needs and wants of customers effectively and efficiently, but when they continuously change, it makes it difficult to integrate SCM for a longer period of time as market dynamics also change rapidly, hence SCM integration may seem like a short term orientation.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings, conclusions and recommendations. It covers the summary of findings organized as per research objectives, then the conclusions drawn from those findings and finally both policy recommendations and suggestions for further study.

5.2 Summary of the Findings

The study sought to investigate application of supply chain management practices in the banking industry. Its specific objectives were to: establish supply chain management practices used in the banking industry in Kenya; establish the challenges of supply chain management practices faced by the banking industry in Kenya; and establish the influence of supply chain management practices in the banking industry in Kenya.

Regarding SCM practices, the study found that commercial banks in Kenya have adopted collaboration with suppliers on long term relationships, preparation of specifications with suppliers, existence of a supply chain data base, integrated information technology and existence of environmental policy. These practices are not enough even though they had been adopted and implemented to a great extent. The study found that few best practices had been fully implemented with majority still lagging behind.

On the challenges of supply chain management, the study found that Uncertainty in terms of demand, Political interference in SCM, Bulky materials to be transported, Uncertainty in terms of supplies, Lack of financial resources and inefficient tender handling are challenges facing commercial banks in Kenya.

The relationship between Supply Chain Management Practices and Performance, the study found that three variables out of the six, namely Supplier Relationships, Reverse logistics, and Outsourcing were found to have strong statistically significant relationships with performance. The other three variables, namely Information Technology, Green supply chain practices and Lean Suppliers were found to have weak relationships which were not statistically significant.

5.3 Conclusions

From the findings, the study concludes that commercial banks in Kenya have adopted collaboration with suppliers on long term relationships, preparation of specifications with suppliers, existence of a supply chain data base, integrated information technology and existence of environmental policy. SCM practices which are yet to be fully adopted include: Supplier Selection and evaluation, Outsourcing and Sharing of Information with Suppliers.

The study concludes that Uncertainty in terms of demand, Political interference in SCM, Bulky materials to be transported, Uncertainty in terms of supplies, Lack of financial resources and inefficient tender handling were challenges facing commercial banks in

Kenya. It concludes that Supplier Relationships, Reverse logistics, and Outsourcing have strong statistically significant relationships with performance.

5.4 Recommendation

The study has revealed that the supply chain management practices are applied to varying degrees by commercial banks in Kenya. The study recommends that all banks be urged to adopt equally these practices in order to enhance performance.

The study has revealed that supply chain management practices explain 63.7% of the variance on performance of commercial banks in Kenya. This being a high percentage, the study recommends that commercial banks be encouraged to enhance adoption of these practices since they have the potential of improving their performance.

5.5 Limitations of the Study

The study was limited to supply chain practices in the banking industry. The study did not find the relationship to performance on all practices but limited itself to Information Technology, Green Supply Chain management, Supplier Relationships, Reverse logistics, Lean Suppliers and Outsourcing.

Time was also a limitation. Time that was taken to conduct the research was not enough to collect data that can influence policy making. This made the researcher narrow the study population to only commercial banks in Kenya.

5.6 Suggestion for Further Research

Enhancement of adoption of supply chain management practices may require benchmarking for best practices. The study therefore suggests that commercial banks should carry out a comparative study with other leading banks around the world in order to benchmark for best practices in supply chain management practices.

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APPENDICES

Appendix One: Questionnaire

Part A: Personal Profile

- 1) Gender: Male Female
- 2) Age (Tick whichever appropriate)
- 20 – 29 Years [] 30 – 39 Years []
- 40 – 49 Years [] 50 and over []
- 3) What is your highest level of education?
- Certificate [] Diploma []
- Higher National Diploma [] Bachelors []
- Masters [] PhD []
- 4) For how long have you served in the organization?
- Less than 2 years [] 2 – 5 years []
- 6 – 10 years [] 11 years and more []
- 5) Which management level do you fall under?
- Top [] Middle [] Low []

Section B: Level of Adoption of Supply Chain Management Practices

- 6) With regard to supply chain management practices, rate the extent to which they have been adopted and are used in your organization. Use the scale 1 – 5 where 1 = Very small extent; and 5 = Very great extent

	1	2	3	4	5
Green Supply Chain Management Practices					
Existence of environmental policy					

Reverse logistics					
Reduction of fuel consumption					
Collaboration with Suppliers on long term relationships					
Preparation of specifications with Suppliers					
Real time delivery					
Integrated information technology					
Existence of a supply chain data base					
Free Flow of information among members of staff and suppliers					
Sharing of Information with Suppliers					
Supplier Selection and evaluation					
Outsourcing					
Lean Suppliers/Supply base reduction					

Section C: Challenges of Supply Chain Management Practices

7) To what extent does your organization face the following difficulties during the adoption of SCM practices?

	Very great Extent	Great extent	Neutral	Low extent	No extent
Political interference in SCM					

Bulky materials to be transported					
Lack of financial resources					
Inefficient tender handling					
Special materials to be transported					
Uncertainty in terms of demand					
Uncertainty in terms of supplies					
Not paying suppliers					
Poor order request form filling					
Lack of top management support					
Lack of qualified personnel					
Poor infrastructure					

Section D: Influence of Supply Chain Management Practices

8) To what extent do you agree with the following statements regarding the impact supply chain management practices have in your organization? Use the scale 1 – 5 where 1 = Strongly agree; and 5 = Strongly disagree

	1	2	3	4	5
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Information Technology					
There is effective automated ordering system in the organization					
Information exchange between our suppliers and us is timely					
IT systems is adequate in the supply chain					
There is accurate information between suppliers and us					
Data is easily shared between suppliers and us					
Green Supply Chain management					
The environmental policy has been fully implemented within the organization					
Suppliers have adhered to supply of environmental friendly goods					
Suppliers are informed of the need to supply recyclable goods					
Staff are sensitized on environmental awareness					
Staff are able to determine goods that are environmentally friendly					
Supplier Relationships					
Suppliers deliver goods prior to payment					
We frequently interact with suppliers to set standards					

We frequently measure and evaluate supplier satisfaction					
Suppliers are part of the organization					
We conduct Joint team building activities with our suppliers					
Reverse logistics					
Customers receive goods and services at the right time					
There is Increased capacity to offer services to customers					
There exists a vehicle maintenance policy					
Surplus items are sold and there is reuse of recyclable products					
Services/products are distributed to customers					
Lean Suppliers					
There are manageable suppliers					
Quality goods are delivered by suppliers					
Suppliers understand what the bank needs					
There is equal chance in tendering process					
There is a short lead time of service delivery					
Outsourcing					

There is quality in outsourced services					
Cost cutting has been seen on outsourced services					
There is improvement on service delivery					
Supplier and customer meet regularly to discuss quality of outsourced services					

Section E: Supply Chain Performance

9) To what extent do you agree with the following statements regarding the performance of your organization?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Lower inventory days of supply					
Accurate fulfilment of orders					
Reduced cost of sales					
SCM has led to faster supply chain response time					
There is good line item fill rate					
There is value addition on products					
There is timely delivery of products					

Appendix Two: Commercial Banks in Kenya

1	African Banking Corporation.	
2	Bank of Baroda Kenya Ltd.	
3	Bank Of India (K) Ltd.	
4	Barclays Bank of Kenya Limited.	
5	Bank of Africa.	
6	CFC Stanbic Bank Limited.	
7	Charterhouse bank Ltd	
8	Chase Bank (K) Limited.	
9	City Finance Bank limited.	
10	Commercial Bank of Africa Ltd.	
11	Consolidated bank of Kenya Ltd.	
12	Co-operative Bank of Kenya Ltd.	
13	Credit Bank Ltd.	
14	Development Bank of Kenya Ltd.	
15	Diamond Trust Bank of Kenya.	
16	Dubai Bank Ltd.	
17	Equatorial Commercial Bank Ltd.	
18	Equity Bank	
19	Ecobank Ltd.	
20	Family Bank Ltd.	
21	Fidelity Commercial bank Ltd.	
22	Fina Bank Ltd.	
23	First Community Bank Ltd.	
24	Giro Commercial Bank.	
25	Guardian Bank.	
26	Gulf African Bank Ltd.	
27	Housing Finance Ltd.	
28	Habib Bank A.G. Zurich.	
29	Habib Bank Limited.	
30	Imperial Bank Limited.	
31	Investments & Mortgages (I&M) Bank.	
32	Kenya Commercial bank Ltd.	

33	K- Rep Bank.	
34	Middle east Bank Kenya Ltd.	
35	National Bank of Kenya.	
36	National Industrial Credit Bank.	
37	Oriental Commercial Bank	
38	Paramount – Universal Bank Ltd.	
39	Prime Bank Limited.	
40	Prime Capital and Credit Finance Ltd.	
41	Savings and Loan (K) Ltd.	
42	Southern Credit Banking Corporation.	
43	Standard Chartered Bank (K) Ltd.	

Source: Central Bank of Kenya (March, 2009) APPENDIX IV: