SUPPLY CHAIN MANAGEMENT PRACTICES AND PERFORMANCE IN INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS IN NAIROBI

\mathbf{BY}

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DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any			
institution or university other than the University of Nairobi for examination.			
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DEDICATION

To Princess for being a source of inspiration to me, I strive to be and do better every day so that I can lead by example.

To Eliud for your love, care, moral support, you have been a strong pillar to me I thank God for you.

My beloved parents you have always believed in me even when I doubt myself you have always been there to assure and reassure me that I can do it, you have supported me financially in the biggest way possible, I could never thank God enough for you and I pray that you live long to see many more years and your many other generations to come.

To my family and friends for your moral support and prayers may the Almighty God bless you all.

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I am grateful to the Almighty God for His care love protection and also seeing me through this whole course I can't thank Him enough.

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I look forward to their support as I finish the remaining part for a successful project.

May the Almighty God bless you all

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ABREVIATIONS AND ACRONYMS

BSC - Balance scorecard

INGOs - International Non-governmental Organizations

NGO - Non-governmental Organizations

SC - supply chain

SCM - supply chain management

SCMP - supply chain management practices

SACCOS - Savings Credit and Cooperative Society

RBV - Resource Based View

UK - United Kingdom

ABSTRACT

Non-governmental Organizational are key to the third world and underdeveloped countries based on their role in the provision of support to the poor and disadvantaged in society through projects in schools, water & sanitation, healthcare & infrastructure development The study was aimed at establishing supply chain management practices and performance (SCMP) of INGO's in Nairobi. It was specifically aimed to establish how, customer relationship management, lean management, information sharing, information communication technology strategic partnerships and outsourcing practices affect performance of INGO's in Nairobi. The Resource based view Theory and strategic choice theories were used. The study used a descriptive statistic in its methodology SCMP and performance of private hospitals in Nairobi. This study used primary data. Gathering of data was effected through structured questionnaires. Procurement managers and the equivalent were the targeted population from the 64 INGO's in Nairobi. These questionnaires were issued through drop and pick method, coded, keyed and analyzed using both descriptive and multiple regression analysis. The regression model used had four variables. Customer relationship management, lean management, information sharing, information communication technology strategic partnerships and outsourcing were the dependent variables while SC performance was the independent variable. The study findings indicated that customer relationship management, information communication technology and strategic partnerships had been implemented in the INGO's in Nairobi. The findings on objective two indicated that SCMP have a positive impact on: cost as highest impact, timeliness the second highest impact and the least impact on flexibility as SC performance indicators of INGO's in Nairobi. The major constraint of the investigation is that it was based on the International Non-governmental Organizations in Nairobi. Other future academicians should research on supply chain management practices in INGO's alone. Future studies need to be carried out on both local and international NGO's. Key words: Supply chain management, SCMP, performance, INGO's.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Over the years there has been a tremendous increase in the need to adopt responsive, hasty, and service focused supply chains from Lean, cost and efficiency focused supply chains. Dynamics in the external environment, unpredictable demand forces and high competition have led to realign their supply chains and gain competitive advantage (Gimeze and Ventura, 2005). Due to the challenge to efficiently and effectively execute their daily business activities, the demand for a more elaborate and comprehensive supply chain practices has risen. This came because the demand for goods and services delivery to the right destination and time increased. Most businesses have since taken keen interest on how to have efficient practices to execute their daily operations (Hill, 2007). To counter this firms need to adopt to the practices that will facilitate their ability to delivery of quality goods and services at the lowest costs and exceed their customer expectations. It is now a prerequisite for any organization deemed competitive and enhancing profitability. To satisfy these demands organizations are progressively executing SCMP into their daily undertakings (Harps, 2000); (Stonebraker and Afifi, 2004).

SCM of late has become a relatively conventional procedure across enterprises, Ralston (2013), the main intention is to meet demands for clients for the numerous commodities that it provides, Preuss (2005). Recently, SCM has become among the essential aspects in a business that is seeks to realize a relatively competitive as well as vibrant enterprise setting.

1.1.1 Supply Chain Management Practices

SCMP is identified as a strategic tool for enterprises to enhance their performance as well as attaining effectiveness through strategic partnerships, supplier and client associations, and material sharing and information technology (IT). The SCMP are the numerous undertakings by

administration of any firm to enhance the practicability of the cohesive SC. They are a collection of actions undertaken in a firm to enhance good management of its supply chains (Lambert et al., 1998). SC is a structure contains enterprises that undertake the processes of obtaining inputs, production and finally delivering augmented outputs to the lower level to final client (Christopher, 1998).

SC insists on incorporation of SC processes and any data stream for attaining a competitive advantage of dependability and stability (Zuckerman, 2004). It is a connection of a system which create raw materials, adds value to them into first goods and then ultimate merchandises, and to take the commodities to clients by a delivery process is what is termed as Supply chain management. Besides it also entails monitoring and coordination of duties carried out by various players who are engaged in the production processes from different industries and companies. The entire supply chain must be understood well if there is need for effective management of the SC. As per this investigation, SCMP have been recognized as: strategic supplier organizations, customer association, outsourcing, as well as information communication Technology.

1.1.2. Supply Chain Performance

Performance is a administration issue that should be fully comprehended. It contains strategic and operational objectives which could simply be attained if the administration comprehends what the target performance. The parameters assess the willingness and proper usage of the assets producing accounting revenues. It shows the proficiency of the administration development (Chan, 2005). The explicit performance metrics to be employed in this investigation according to private firms are: tractability, cost, dependability, approachability, appropriateness as well as client satisfaction.

Supply chain performance is a comparative metric that determines the manner employs its obtainable resources like assets both tangible and intangible in meeting customer needs. Performance measurement is a logical procedure of measuring concepts and activities in firms, (Neely et al., 1997). Measurement of performance facilitates integration among the supply chain partners. Two broad categories of objectives of any firm are short-term objectives e.g. to facilitate productivity, reduce wastes, reduce costs related to inventory and reduce waiting time and long term objectives e.g. Strategic partnerships, increase market share, which form basis of performance measurement in a firm (Li et al., 2006); (Lyons et al., 2004).

The extent which supply chain's activities meet end customer need is what is termed as SCP (Kwai et al., 2004). SCP is measured using various performance metrics of responsiveness. According to, Cuthbertson and Piotrowicz (2011), supply chain operations reference (SCOR) model bears five key aspects utilized in this investigation: SC delivery, consistency, tractability, appropriateness, cost. SC performance have been categorized as: quality, time, cost as well as tractability. To measure supply chain performance, this study is going to focus on: cost, quality, and responsiveness.

1.1.3 International Non-governmental Organizations in Nairobi

Non-governmental organizations, or NGOs, are generally regarded as organizations which have not been formed by governments or agreements among governments According to Jacobson (1994). NGO's are defined as private voluntary groupings which are made up of individuals or associations that are operated for other purposes rather than commercial or profit. International non-governmental organizations in Kenya are grouped broadly into: INGO's which operate within Kenya based on certificate of registration they possess but have been incorporated in other countries rather than Kenya and the national and the national NGO's which operate in their local

countries. The NGO's were first started in the tears 1839.Most of NGO's are donor driven and different donors vary in terms of how they want their resources to be managed and this inevitably affects the kind of activities the NGO's engage in and even provision of funds for career development activities (Oster, 2004).

The registered non-governmental organizations in Kenya are broadly categorized into two; international and national. International Non- Governmental Organizations are those that are incorporated in other countries other than Kenya but operate within Kenya under a certificate of registration. According to the records held at the NGO Registration Board as of 2016, the total number of INGO's in Nairobi are 92. Source of funding for the INGO's ,operating sectors like the Heath, education sectors are the major differentiating factor for the INGO's operating in Kenya. Council of NGO (2015). The board adds that globalization and the opening up of democratic space in Kenya has further contributed to an expansion in the nongovernmental organizations sector activities in the country, NGO directory (2017).

1.2 Research Problem

A considerable number of firms have recognized the strategic importance of SCM in the attainment of the organization's performance in their business process. Organizations are required to therefore enhance their performance levels with the intention to create value for money in products and services production (Andrew, 2015). Burgress, Singh & Koroglu (2006) highlighted the importance of SCM but noted there is little research done on supply chain practices.

Various studies have been done on SCMP and performance of International NGO's in Kenya. Globall Boddy et al (2000) Bordonaba & Cambra (2009) carried out a study on bearing of SC partnering on performance and ascertained that the supply chain partnering is very vital in proving that organizational performance is enhanced by strategic collaboration in the whole supply chain .Other than that, strategic relationships between supplies chain partners and coordination facilitates performance in the organization, Govindaraju & Ibrahim (2011) carried out a case investigation on SCP and performance in Malaysian electronics industry and concluded that, there are six basic practices which have strong positive relationship with performance however the study was based in the Malaysian context and hence the results could not be applied to the Kenyan INGO's. Ashok, Kamble and Raut (2015) in their study on the relation between SCP and performance of the Indian retail business. The findings asserted that a strong correlation among SCMP and performance existed. Sundram, Baerber, Radwan, Kumar, Garza-Reyes and Abdi (2016), studied the impact of SCMP and performance of manufacturing firms where they came into a deduction that a positive link exists between supply chain practices and performance dimensions which were both statistical and non-statistical.

Locally, Ngari (2008) in his case study on SCM practices at the University of Nairobi asserted that the supply chain practices were not fully implemented by the University. However the study was a case study of the University of Nairobi and hence the findings could not be applicable to the NGO's sector. Hassan (2012) in his study on supply chain practices in the humanitarian sector asserted that these practices are key in facilitating performance in this sector since its performance is based on the speed at which aid is delivered at areas where there is disaster. The researcher recommended on further research to be done in order to find out on the challenges affecting the absorption of these supply chain practices by the university, however the study was based in the

humanitarian sector and not the INGO's in Kenya. Wambois (2016) researched on the lean supply chain management practices and operational performance of the manufacturing firms in Kenya. Most firms have adopted this lean SCM. In addition the results indicate that there exists an absolute correlation between lean SCM and operational performance of the manufacturing firms. Mutisia (2017) researched on SCM practices and performance in private hospitals where she established that a positive link exists between adoption of SCMP and performance in private hospitals. Okiro (2017) studied on practices and performance in Kenyan public universities. However the investigation was based on public universities and failed to research on INGO's in Nairobi.

All the previous studies above indicate that a knowledge gap exists based on the fact that there has been no single research has been carried out on the SCM practices and performance of INGO's in Kenya. This study hence seeks to answer these questions: What practices in supply chain management are adopted by INGO's? What are the effects of SCMP on performance of INGO's in Nairobi?

1.3 Objectives of the study

- To identify the SCMP implemented by international Non –governmental organizations in Nairobi.
- ii. To ascertain effects of SCMP on performance of International Non -Governmental organizations in Nairobi.

1.4 Value of the Study

This investigation will provide adequate information to the INGO's, in Nairobi in order to understand and execute these process to boost performance. Thus professionals in SCM will get this investigation valuable for information and process execution.

Other profit making and governmental firms will also find these investigations useful as these firms will simplify their SCM therefore contributing to the nation's GDP.

Researchers and scholars will utilize the outcomes of this reference for their investigation on the basis the literature evaluation. Further they will utilize the outcomes the gaps in this investigation as a foundation for further investigations.

The government and other policy holders will gain from this study based on the fact that they will be able to understand the effect of SCMP adoption on performance in the INGO's and hence can apply the same to other sectors.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This part illustrates different reviews of collected works for the objective of the investigation to ensure on the relevance to the research problem. The chapter presents the theoretical literature review supply chain practices, empirical literature review and concludes with the conceptual framework

2.2 Theoretical Literature Review

Different theories developed by different scholars and how they are related to the topic of study are what make up this section.

2.2.1 Resource-Dependence Theory

The theory was developed by Pfeffer and Salancik in 1978 and asserts that environments affect and constrains firms and hence firms act in order to control dependencies on resources by setting various forms of inter-organizational arrangements. This theory expounds on the fact that external resources used in manufacturing of goods originate from the external environments. This theory explains that the behavior of the firm is affected by external resources of organizations. This theory adds that for firms to continue being operational and avoid dependencies on the external environment they have to come up with various strategies like formation of mergers, adoption of modern technologies partnerships. Sanderson, Lonsdale and Mannio (2015).

This theory is related to this study based on the fact that there is need for firms to come up various strategies like outsourcing, benchmarking, mergers and acquisitions etc. in all attempts to improve

their performance and be competitive, hence meet their customer needs and requirements. By so doing it avoids overreliance on the external environment by the firms.

2.2.2 Strategic Choice Theory

This concept explains the relationship in-between a firm's actions and events (De Rond and Thietart, 2007). This theory is essential to strategic management by focusing on cross-sectional support in enterprises (Jemison, 1981). It tells the links between administration decisions and performance and the overall interaction with the surroundings. The theory considers firms to as being influenced by environments and resolutions made by administration (Miles et al., 1978). The resolutions make or purchase must equate to dependence against value to meet the goals of the organization. According to subcontracting resolution, it recommends to lowering of dependencies. The resolution whether to cooperate with dealers is subject to the value inherent in the partnership (Nollet et al., 2005).

This theory is related to this study based on the fact that, a firm can decide to make strategic decisions like strategic collaboration, Subcontracting, and information sharing with appropriate dealers. The choice is subject to the senior administration and is a key choices to produce and require strategic assessment to decide on on the worthiest investment undertakings to produce so as to boost the performance of the INGO's and attain their goals.

2.3 Supply Chain Management Practices

There are many SCMP but for INGO's, the most relevant processes comprise outsourcing, ICT, strategic partnerships, and customer association management. The processes are discussed in the next sections.

Outsourcing according to Baily (2008) refers to a strategy through which firms gives out to an external service provider, services, or product components that are not key to the enterprise's activities aimed at reducing cost, improving quality or supply of specialized products and services Fynes & Foss (2005). Outsourcing comes in as a management strategy by which organizations outsource non-core functions to specialized personnel in order to better the performance of the business Lysons and Gillingham, (2003). Outsourcing allows the organization to focus on the activities that have distinctive advantage. Firms that have used outsourcing in the past have realized a significant transformation in their performance in terms of reducing costs, protecting confidentiality of information, and reducing loss of control over the activities outsourced, Susan (2011).

Information communication technology (ICT) entails use of technology in carrying out various transactions of a firm. New technologies like enterprise resource planning (ERP) among others facilitates real-time inventory access, continuous exchange of functioning information and collection of crucial performance information. Adoption of information technologies like Electronic Data Interchange (EDI), have led to numerous impacts on the performance of organizations, Chong and Ooi (2008). Applications such Enterprise Resource Planning (ERP) provides competitive advantage for the business by improving decision making process, planning and control operations (Mabert, 2001). Technology increases efficiency and reduces cost of operations. It helps in integration of backed practices to have a unified supply chain processes.

Lack of ICT in management of supply chains has led to ineffective execution of supply chain functions hence weak communication in the supply chain. (ICT) facilitates communication between supply chain partners, both within and outside the firm in a fast and a cost efficient manner.

Strategic Partnership according to (Li et al., 2006), is a collaboration between two or more businesses for the purposes of information interchange in research, product development, marketing, distribution, and sales. There are three types of partnerships that can exists in an organization: one limited to interactions, one where two firms have a longer time view of the relationship and that whereby the firm shares an important operational and strategic combination, Lambert and Gardner (1996). They help firms improve their effectiveness in all their operations and be able to deal with suppliers to ensure that they meet customer needs and requirements. The main purpose is to cut on all costs related to goods and services and all activities done to them in a firm (Li, 2006). Partnership helps in increasing market base, access to market information, product diversification, risk diversification, economies of scale, and access to new technology (Tan, 2000). Through partnerships, organizations are able to divide up risks and returns to gain supply chain advantages such as reducing cost of distribution, Ellan and Cooper (1998). Supply chain partnerships have proven to be beneficial to many businesses as it grows revenue and improves general performance of the organization (Abdul, 2001). The practice helps businesses to pull resources, reduce transaction costs, rapid response to market demands and helps in concentrating in the core competences of the company.

Customer relationship management entails developing a long lasting link between the enterprise and the dealers with a major goal of improving the performance levels (Fynes & Voss, 2002). Through creation of a relationship with each valued customer through successful use of individual account information, CRM defines excellent real time consumer's services, (Kotler, 2003). It

entails a collection of all practices which are implemented in order to manage all needs of the customer and complaints and ensure creation of long term relations with an aim of client contentment (Noble & Tan et al., 2014). Long term relationships created out of trust create barriers to competition and result to lasting competitiveness. Relationships with customers are important for corporate survival due to the high growth in mass customization and personalized service .Successful implementation of SCM programs requires good correlations with supply chain members. Differentiation of a firm's products is facilitated by close customer relationship (Kotle, 2003).

2.4 Empirical Literature review

Sahay and Mogan (2003) studied on the SCMP in Indian industry. The study used a sample size of 156 firms in carrying out research. Establishing the status of supply chain in Indian industry with the focus of four elements: supply chain strategy, SC integration, outsourcing and information technology was the aim, of the study. The researchers used survey questionnaires in data collection. There is need for aligning of SCM strategy with business strategy to provide client fulfillment, minimize costs by use of Information technology. In addition the findings indicate a strong correlation between SCMP and performance. The weakness of the study is that it only focused on the Indian industry as a case study.

Demibarg (2007) studied on SCMP on performance of SMEs in Turkey. The aim of the study was to establish relationships between the SCM, operational performance and SC linked organizational performance specifically in the SMEs of Turkey. The researchers used a sample of 203 firms in their study. Outsourcing, supplier relationships and e-SC bear a positive bearing to performance.

The major limitation of the study was the narrow focus of the SMEs in Turkey.

Kim (2006) undertook an investigation on bearing of SCMP integration and competition capability on performance. The goal of the investigation was to show the existence of interrelationships between SCM integration, SC level integration and competition capability. Questionnaires were used in data collection using a sample of 244 Koreans firms and a total of 379 Japan's professional members. The findings indicate that SC integration have more impact on performance in small scale firms compared to large firms. Besides tighter relationship between SCM and competition capability has greater impact on performance in large scale firms. In addition interrelationship between SC practices and competition capability have higher impact on performance.

Hamister (2011) carried out study on SCMP in small retailers. The study used a survey type of study where the sample size was 79. The goals of the investigation were to establish the supply chain processes in the small retailers sector, to ascertain if the SCMP contribute to performance in the small retailers and to what extend these practices have been implemented in the small retailers. The results indicate that a positive link exists between SCMP and category performance. The study had a narrow focus on the small retailers which could not be used to generate conclusions on other industries.

Locally, Mwilu (2013) conducted a research on SCMP and performance in public research institutions in Kenya. The aims of the investigation were to ascertain the extend of execution of SCM in public research establishments in Kenya, to establish the effect of these practices on performance and finally establish challenges sought in the implementation of these practices in these institutions. Questionnaires were used in data collection. A sample size of 36 firms was used

and descriptive statics was used in data analysis. Logistics, outsourcing, leanness and information technology replicated strong relationship to performance as compared to other practices. Besides to a great extent, most of these firms have adopted SCM. The main constraint of this investigation is that it is limited to public research institutions in Kenya.

Karanja (2014) studied on the SCMP of small and medium-sized office supplies firms in Nairobi Kenya. Aim of the investigation was to ascertain the SCM used by office supplies firms in Nairobi, to sought out benefits got in adoption of the SCM by these firms and to find out the challenges faced by these firms in implementation and adoption of these practices. Descriptive survey design was used where self-administered questionnaires were used in data collection from a sample size of 125 firms. SPSS was utilized for data analysis. The findings showed that most SMEs have implemented these practices. High interest rate was seen to be the major challenge in the implementation of SCMP in the SMEs. Limitation of the study was that the study relied upon by only office equipment and supplies listed in the Nairobi online business directory which is a methodological weakness.

Okumu (2015) conducted a study on the SCMP and performance of Kenyan cement manufacturing enterprises. The aim of the research was to expound on the correlation between SCM and performance. The study used a sample size of six cement manufacturing companies. Semi structured questionnaires were used in data collection. Descriptive analysis was used in analyzing the data collected. Cost driven outsourcing, use of inventory management practices like VMI among other practices have undeviating positive bearing on operational performance of cement manufacturing enterprises. Besides more than eighty percent of these firms have adopted SCM. The main constraint of the investigation was the narrow scope the study i.e. cement manufacturing firms.

Wambua (2016) studied on the lean SCMP and operational performance of the manufacturing firms in Kenya. The goal of the investigation was to verify the lean SCM utilized in the manufacturing companies, to verify the bearing of lean SCM on operational performance of manufacturing companies in Kenya and to determine the encounters in the execution of these processes. The investigation used a sample size of 137 firms. Primary and secondary data was utilized. From the outcomes, many firms have adopted lean SCM .In addition the results indicate that there exists a positive relationship between lean SCM and operational performance of manufacturing firms in Kenya.

Kiplagat (2017) carried out a research on SCMP and performance of Kenyan public universities. The goal of the investigation was to ascertain the extent of adoption of SCMP in the public universities in Kenya and their bearing on performance. The investigation findings indicated that there exists a positive link between usage of SCMP and performance of public universities. However, the study was solely based on public universities and not INGO's

2.5 Conceptual framework

Independent variable

It shows the independent variables i.e. outsourcing, information communication technology, strategic partnership, and customer relationship management. It also shows the dependent variable i.e. supply chain performance.

Dependent variable

Outsourcing Information communication technology Strategic partnerships Customer relationship Management Performance • Flexibility • Cost • Timeliness

Source: author, (2018)

Figure 2.1 Conceptual framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

It contains information about the design of the research, population and sample that was selected for the study. The approaches that were employed in obtaining data and analysis and presentation are highlighted in this part.

3.2 Research Design

A research design is the data collection process which helps in hypothesis testing so as to give answers to questions regarding the subject under study Mugenda and Mugenda (2003). Descriptive research design was adopted in this study. This design was adopted as the researcher has interest in the state of affairs in a particular field and the variables should not be manipulated. This design facilitated the ability to verify the effect of SCMP on performance in INGO's in Kenya

3.3 Target Population

The investigation population was the INGO's in Kenya. Thus the population of this study was made up of 96. The targeted respondents were the procurement managers and their equivalent in the INGO's in Nairobi. The study carried out a census whereby all the respondents were studied based on the fact that the population is relatively small.

3.5 Data Analysis

Data collected was screened for accuracy, consistency, uniformity and completeness in preparation for analysis. Data for objective one was analyzed through descriptive statistics, data for objective two was analyzed through of multiple regression analysis the data was summarized and tabulated by descriptive measures. Regression analysis was used to identify the bearing of the SCMP on performance. SCMP were used as independent variables and the SCP as the dependent variable.

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

Where;

Y = Supply chain performance

 α – This is a constant

 β_1 , β_2 , β_3 , and β_4 – are the coefficients of the independent variables X_1 , X_2 , X_3 , and X_4 respectively.

 X_1 – Outsourcing

 $X_2 - ICT$

X₃ – Strategic Partnerships

X₄– Customer relationship management

E - Error term describing the changeability of the aspects not stated.

CHAPTER FOUR

DATA ANALYSIS, RESULTS, AND DISCUSSION

4.1 Introduction

This part is made up of data analysis, outcomes and interpretation. It entails the outcomes on the study sought on SCMP and performance of INGO firms in Nairobi. The investigation target population was the procurement chiefs plus their corresponding in the procurement division.

4.2 Response Rate

In data collection, an aggregate of 64 questionnaires were disseminated to the respondents out of which 51 were dully filled and were deemed adequate for data analysis. As per Mugenda and Mugenda (2003) response rate of 50% is considered acceptable, 60% satisfactory and over 70% rated extremely satisfactory. This investigation's response rate, was 76%. Thus, this was deemed very satisfactory and will provide considerable information that could be utilized in simplification of the research variables of the investigation being pursued and therefore the researcher went ahead to do the data analysis.

4.3 Demographic Information

The investigation aimed to have demographic material of the respondents to carry out this study effectively. Therefore, all the demographic information was to establish the relationship between the information gathered based on experience, education level, and the work experience.

4.3.1 Gender

The respondents were required to specify their gender; the outcomes are as summarized in the table 4.1 below:

Table 4.1: Gender

Gender	Frequency	Percent
Male	24	47
Female	27	53
Total	51	100.0

Research data, 2018

Table 4.1 showed the results of the variable gender, and 47% of the respondents constituted male whereas 53% constituted female. This indicated that there exists equal distribution of staff in terms of gender in INGO's in Nairobi.

4.3.2 Highest Qualification

The respondents were required to state their education background. The table 4.2 below points out the findings.

Table 4.2: Education

Education level	Frequency	Percent
College	13	21
Undergraduate	29	48
Masters	19	31
Total	51	100.0

Research data, 2018

As per the outcomes of the variable education shown in table 4.2, 25% of the respondents had college level education, 57% had degree level education, and 38% of the respondents has a master's level education. Based on the respondents' education level distribution, they had a broad understanding of the data sought on SCM practices.

4.3.3 Experience

The investigation aimed to verify the amount of years worked at the firms. The respondents were requested to point out the number of years they had been in the firm. The outcomes were pointed out in table 4.3 below.

Table 4.3: Number of Working Experience

Experience Distribution	Frequency	Percent
less than 5 years	24	47
6-10 years	22	43
over 10 years	5	10
Total	51	100.0

Research data, 2018

Table 4.3 showed the results of the variable number of working experience respondents have worked with their organizations. The outcome showed that 47% of the respondents had been there below 5 years, 43% had been there between 6-10 years and 10% had been their fore more than 10 years. The respondents possessed a sufficient working experience in the data sought and they were in a position to provide data that will facilitate meeting of the study objectives.

4.4 Supply Chain Management Practices Implementation

The study had its first objective of establishing the extent of adoption of SCMP in INGO's in Nairobi. To determine this, statistics was performed in all the data sourced on numerous SCMP.

4.4.1 Outsourcing

The section examined the extent outsourcing as a SCMP had been implemented in NGO's in Nairobi, and a Likert scale was used with 1-5 levels where (1) Not at all (2) Small extent (3) Moderate extent (4) Great extent (5) Very great extent. The findings of outsourcing are shown in table 4.4 below:

Table 4.4 Outsourcing

Outsourcing	Mean	Std. Deviation
Focusing on core competencies	4.19	.22
Cost-driven outsourcing through cost reduction	3.67	.68
Improvement of service levels	3.62	.89
Optimal level of outsourcing through cost reduction	3.59	.85
Overall Mean Score	3.76	.66

Research data. 2018

From table 4.4, the results of outsourcing as SCMP was shown, and it indicated that INGO's in Nairobi have adopted outsourcing as a SCMP based on the overall mean score of 3.7 and low variation showing the overall standard deviation 0.66 whereby: the firm focuses on core competencies indicated a mean value of (M=4.19,SD=0.22), Cost-driven outsourcing through cost reduction indicated a mean of (M=3.67,SD=0.68), the firm has improved service levels due to outsourcing indicated a mean of (M=3.62,SD=0.89), the firm has outsourced its non-core activities to external service providers indicated a mean value of (M=3.59,SD=0.85). As per the outcomes pointed out in the table 4.4. Outsourcing has been adopted to a moderate extent by the INGO's in Nairobi. Hence the INGO's are able to emphasize on their key undertakings and lease out their non-key undertakings.

4.4.2 Information Communication Technology

The respondents were required to show to what extent IT as a SCMP had been implemented in NGO's in Nairobi on a scale of 1-5 where (1) Not at all (2) Small extentt (3) Moderate extentt (4) Great extent (5) Very great extentt. The outcomes are pointed out in the table 4.5 below:

Table 4.5 Information communication technology

Information communication technology	Mean	Std. Deviation
The firm applies current inventory management technologies like, Vendor Managed Inventory (VIM) and Electronic data interchange (EDI)	3.96	.71
The firm acquires and maintains appropriate resources like; IT, training etc.	3.94	.70
Advances in on-line information systems.	3.90	.78
Top management support for research and innovation and investments in current technology.		.58
Overall Mean Score	3.87	.69

Researcher, 2018

Table 4.5 displayed the results of the independent variable, information communication technology, and it focused on the mean and standard deviation. According to the table 4.5, ICT had been adopted as a SCMP in NGO's in Nairobi as indicated by overall mean score 3.87 and standard deviation of 0.69 whereby: The firm applies current inventory management technologies like, Vendor Managed Inventory (VIM) and Electronic data interchange (EDI) indicated (M=3.96,SD=0.71), The firm acquires and maintains appropriate resources like; IT, training etc. indicated a mean of (M=3.94, SD=0.70), the firm advanced it's online information system indicated a mean of (M=3.90,SD=0.78), Top management support for research and innovation and investments in current technology indicated a mean value of (M=3.69,SD=0.58). An indication that to a moderate extent the INGO's are in a position to adequately manage their operations at a lower cost based on their implementation of ICT in their processes

4.4.3 Strategic Partnerships

This section discussed the results of the independent variable, strategic partnership, and it inquired respondents to choose the extent that strategic partnerships as a SCMP had been implemented in NGO's in Nairobi on a scale of 1-5 where (1) Not at all (2) Small extent (3) Moderate extent (4) Great extent (5) Very great extent. Table 4.6 shows the findings:

Table 4.6 Strategic Partnerships

Strategic Partnerships	Mean	Std.
The firm functions simultaneousely with its suppliers to ensure	2.05	Deviation
timely deliveries of services	3.05	.79
The firm cooperates with its partners in implementing its services	2.23	.70
The firm divides their resources with its associates for achievement	2.31	.70
The firm makes and upholds respectable liaison with their associates like dealers, distributors and clients	2.34	.78
Overall Mean Score	2.48	.74

Research data. 2018

According to table 4.6, the means and standard deviations of the results of strategic partnership was shown. Strategic partnerships had only been implemented as SCMP to a small extent by INGO's in Nairobi as shown by the overall mean and standard deviation of 2.48 and 0.74 respectively. The firm works hand in hand with its suppliers to ensure timely deliveries of services indicated a mean value of (M=3.05,SD=0.79), the firm cooperates with its partners in implementing its services indicated a mean of (M=2.23,SD=0.70), the firm shares their funds with its associates for accomplishment indicated a mean of (M=2.31,SD=0.70), the firm develops and upholds respectable liaison with their associates like dealers, suppliers and clients indicated a mean value of (MD=2.34, SD=0.78). The respondents indicated that strategic partnerships had been adopted to a small extent by the NGO's in Nairobi.

4.4.4 Customer Relationship Management

The section focused on the independent variable, customer relationship management, and it inquired respondents to specify to what extent CRM as a SCMP had been implemented by INGOs in Nairobi on a scale of 1-5 where (1) Not at all (2) Small extent (3) Moderate extent (4) Great extent (5) Very great extent. The findings are as shown in the table 4.7 below:

Table 4.7: Customer Relationship Management

CRM	Mean	Std. Deviation
The firm manages customer needs and complaints in a timely manner	4.12	.79
The firm ensures creation of long term relationships with its customers	3.71	.70
The firm ensures customer satisfaction through srvice delivery and ensuring that it responds to querries timely	3.33	.62
The firm has acustomer feedback mechanism	3.25	.69
Overall Mean Score	3.60	.70

Researcher, 2018

The findings of the independent variable, customer relationship management, were presented in table 4.7. The table displayed the means and standard deviation calculated from the responses provided by the respondents. The respondents indicated that CRM practices had been adopted as a SCMP in NGO's in Nairobi as indicated by the overall mean score greater than 3.60 whereby: the firm manages customer needs and complaints timely (M=4.12,SD=0.79) the firm ensures creation of long term relationships with its customers indicated a mean of (=3.71,SD=0.70), the firm ensures customer satisfaction through srvice delivery and ensuring that it responds to querries timely indicated a mean of (M=3.33,SD=0.62), The firm has acustomer feedback mechanism (M=3.25, SD=0.69). INGO's are in a position to satisfy their customer requirements based on a good feedback mechanism that is provide by adoption of CRM as from the findings which indicated to a moderate extent CRM has been adopted in the NGO's in Nairobi

4.5 Effect of Supply Chain Management Practices on Performance

Another aim of the investigation was to ascertain the impact that implementation of SCMP had on SC performance to ascertain this study adopted use of regression analysis. The study outcomes are as indicated below:

Table 4.8 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.808a	.653	.596	.9592

a. Dependent Variable: cost

b. Predictors: (Constant), CRM, IT, strategic partnerships, information sharing, lean management, outsourcing

The findings from table 4.8 indicated the model summary, and it presented the R squared of 65.3% This meant that variations in supply chain performance is explained by the independent variables i.e. while the rest which is about 34.7% is explained by other variables which are not in the model.

Table 4.9 ANOVA^a

Model		Sum of	df	Mean	F	Sig.	
		Squares		Square			
'	Regression	17.862	4	3.681	11.536	$.000^{b}$	_
1	Residual	9.491	46	.920			
	Total	27.353	50				

a. Dependent Variable: Cost

b. Predictors: (Constant), a. Predictors: (Constant), outsourcing, CRM, IT and strategic partnerships,

From the findings in the Anova table 4.9, the results indicate a significance level of 0.000 which shows that SCMP are all statically substantial at 95% confidence level since it is below 5%.

Table 4.10 Coefficients

Model	0 115 0011	dardized ficients Std. Error	Standardized Coefficients Beta	T	Sig.
(Constant)	10.069	1.302		7.734	.000
Outsourcing ICT Strategic	.578 .828	.161	.174 .145	5.137 4.533	.021 .000
partnerships	.043	.160	.168	1.435	.159
CRM	.79	161	.065	5.137	.004

a. Dependent Variable: cost

b. b. Predictors: (Constant), a. Predictors: (Constant), CRM, IT strategic partnerships, information sharing, lean management, outsourcing

From the table 4.10, the t-calculated and the p-value (0.05) shows that CRM, outsourcing, and ICT are significant since they have values of 0.004, 0.021 and 0.000 respectively and all the values are less than the significance level of 0.05 whereas strategic partnership is insignificant with a value of 0.159, which is higher set degree of 0.05.

 $Y = 10.069 + 0.578 X_1 + 0.828 X_2 + 0.043 X_3 + 0.79 X_4$

Where;

Y = Supply chain performance

 α – This is a constant

 $\beta_1,\,\beta_2,\,\beta_3,\,\text{and}\,\,\beta_4-\,\text{Are the coefficients of the independent variables}\,\,X_1,\,X_2,\,X_3,\,\text{and}\,\,X_4\ \ \, \text{respectively}.$

 X_1 – Outsourcing

 $X_2 - ICT$

X₃ – Strategic Partnerships

X₄– Customer relationship management

 $\boldsymbol{\xi}$ - Error term elucidating the changeability of the aspects that are not stated.

4.6 Discussions

The investigation was intended for ascertaining the extent of implementation of SCMP in NGO's in Nairobi. The study was also aimed at defining the bearing of SCMP and SC performance in NGO's in Nairobi. To ascertain the extent of implementation of SCMP in NGO's in Nairobi, the study carried out descriptive statics on all the SCMP investigated under this study. The findings of the study as indicated above ascertained that to a large extent, NGO's in Nairobi have adopted SCMP. The summary of descriptive statics point out that outsourcing, ICT, and customer relationship management indicated with the overall means of 3.76, 3.87, and 3.60. Respectively whereas strategic outsourcing indicated a mean value of 2.48. This is an indication that SCMP had been implemented in NGO's in Nairobi as indicated by mean values greater than 3.0.

Ascertaining the impact that implementation of SCMP has on SC performance of NGO's in Nairobi Kenya was the second objective of the study. To get this findings, the study carried out regression analysis. The findings indicated that implementation of SCMP affects SC performance positively. This was indicated by positive coefficient values in the coefficients table whereby outsourcing indicated: 0.518, ICT: 0.828, strategic partnerships: 0.043, and CRM: 0.79. This is an indication that firms are in a position to experience improved SC performance from the implementation of SCMP in their firms. The study findings also ascertained that 65.3% of SC performance in NGO's in Nairobi was effected by implementation of SCMP. Based on the fitness fit test, a 65.3% representation indicates that this was a good model based on the fact that it was about 60% hence SCMP are good indicators of SC performance. The study findings from the Anova table pointed out a 0.000 significance value as the implication degree a suggestion that the model utilized was substantial as the value is below 0.005 at 95% confidence which indicates that all the SCMP are good predictors of SC performance in NGO's in Nairobi. Level an indication that GSCMP has impact on performance of NGO's in Nairobi.

This investigation congruent the one undertaken by Mwilu (2008) in public research firms, whereby he ascertained that execution of SCMP had a positive impact on performance. Besides this study is in line with a study by Owiti (2014) studied on the SCMP of small and medium-sized office supplies firms in Nairobi Kenya. The objective of the study was to ascertain the supply chain management practices adopted by the SMEs. The outcomes showed that execution of SCMP has a positive bearing on performance of SME's. Owiti (2014) ascertained that adoption of SCMP have positive influence on performance. This study however contradicts with Mahulo (2015) who established that implementation of SCMP in manufacturing firms through use of inventory management practices has impact on performance yet this study established that other SCMP other than outsourcing have positive impact on performance. He only nored implementation of inventory management practices of which under this study has not been considered as a practice.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The overview of the investigation, inferences ascertained from the investigation, suggestions are what constitute this part. This part goes beyond to illustrate nm the various limitations of the study. The study objectives were to ascertain the degree to which the SCMP had been executed NGO's in Nairobi and to ascertain the link between SCMP and performance of NGO's in Nairobi.

5.2 Summary

The investigation intended to establish the degree to which SCMP had been executed in INGO's in Nairobi and their bearing on SC performance. The study adopted use of descriptive statics where data was collected using structured questionnaires from the respondents who were procurement managers or their equivalent in all the INGO's in Nairobi. From the findings on the biographic information indicated that both male and female gender were well represented in study population. Based on the education background of the respondents, the study ascertained that all the respondents had adequate educational background that would facilitate their capability to provide adequate material on the study. Based on the experience of the respondents, the findings indicated that all the respondents had adequate experience in their various positions and hence this was adequate in the provision of data sought by the study. Since most of the respondents had adequate experience and hence understood the various supply chain management practices in INGO's in Nairobi.

The first objective was to establish the level to which SCMP had been executed in NGO's in Nairobi Kenya. Besides the other objective was to ascertain the bearing SCMP had on SC of INGO's in Nairobi Kenya. The findings of the study established that INGO's in Nairobi had adopted supply chain management practices to a great extent which were information technology, information sharing, lean management, outsourcing and customer relationship management. This was pointed out by a positive mean figure for supply chain management practices. Besides the results of descriptive results indicated that to a large extent, supply chain management practices had been implemented in INGO's in Nairobi Kenya indicated by positive mean value above 3.0. The second objective of this study was to establish the impact of supply chain management practices on performance of INGO's in Nairobi Kenya. The results ascertained that the level to which SCMP had a positive bearing on performance. Also the regression analysis outcomes pointed out a substantial; 60 % of the independent variable which was SC performance was well explained the SCMP implemented in INGO's in Nairobi Kenya.

5.3 Conclusion

Efficiency in an enterprise's operations is greatly as a result of the use of SCMP and processes. Non-governmental organizations are key to our economy based on their role in provision of support to the poor and the vulnerable in the society on various issues like education, poverty eradication among others. Summing up, the investigation was intended to verify the level to which SCMP had been executed in the INGO's in Nairobi Kenya, the bearing of these processes on performance of INGO's in Nairobi Kenya.

The findings from descriptive statics pointed out that to a higher level, all the SCMP had been executed in the INGO's in Nairobi. To ascertain this the results from the descriptive statics indicated mean values above three a suggestion that all the processes had been executed to a reasonable level. The outcomes from the regression analysis pointed to that SCMP have effect on performance in the INGO's in Nairobi Kenya. The outcomes of the investigation verified a positive association between the numerous SCMP and performance of INGO's in Nairobi Kenya. In addition to that the p-value indicated a 0.000 value which was a suggestion that the several SCMP employed at INGO's in Nairobi Kenya are statically significant as the figure is below the 0.05 level at 95% confidence level. In addition, the study indicated that 65% of cost, 46% of flexibility, and 51% of timeliness as a SC performance indicators an indication that SCMP have greater impact on cost as compared to other SC performance indicators in INGO's in Kenya is affected by SCMP.

5.4 Recommendations

The INGO's need to focus on SCMP since it results to improved SC performance. There is need for the INGO's to understand the various challenges faced in the implementation of GSCMP and come up with theories to facilitate their mitigation of these challenges. The study was focused on ascertaining the various SCMP that had been implemented in INGO's in Nairobi. The study recommends that there is need for more studies to be carried out on SCMP on other sectors other than the INGO's in Nairobi. In addition, there is need to carry out a cross sectional study on all the INGO's in Kenya other than those in Nairobi.

5.5 Limitations of the Study

The aim of this investigation was to establish the extent of implementation of SCMP in INGO's in Nairobi Kenya. Besides the study was aimed at establishing the relationship between SCMP and performance of INGO's in Nairobi Kenya. The study was only based on the INGO's in Nairobi. The study faced a challenge in data collection based on unwillingness of some of the respondents in providing information. The study failed in bringing out the various challenges faced in the implementation of SCMP in INGO's in Nairobi. The study was solely based on INGO and hence this cannot be used to draw conclusions on the extent of implementation of SCMP both the local and international NGO's in Kenya.

5.6 Suggestions for further Research

The goal of this investigation was to verify the level to which SCMP had been executed in INGO's in Nairobi Kenya. Further studies need to be based on all the INGO's in Kenya rather than the INGO's in Nairobi. To get better conclusions on the study, there is need for a larger population of all both local and NGO's in Kenya to get adequate information and draw conclusions on the data sought on SCMP. There is need other investigations to be carried out in other sectors like, manufacturing firms, pharmaceutical firms among others and not INGO's alone.

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APPENDIX II: QUESTIONNAIRE

University of Nairobi

School of Business

Department of Management science

Research questionnaire

Dear respondents, this questionnaire is for data collection on the supply chain managemen						
practices and supply chain performance of International Nongovernmental organizations in Kenya						
The research is purely for academic purpose and will only be used for that purpose. So, you						
genuine, frank and timely response is important for the success of this study						
General Instructions						
The questionnaire has three sections, please try and complete all the sections						
Please tick appropriately and write your answer where there is no option as applicable.						
Section A (General Information)						
What's your gender male female						
For how long have you worked in your organization?						
Under 2 years						
Do you have knowledge about supply chain management practices? Yes No						

SECTION B Assessment of Supply Chain Management Practices Adoption

II. To what extent has your company adopted the following supply chain management practices?

Please indicate on a Scale of 1-5 where: 1 = No Extent; 2 = Small extent; 3 =

Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

NO	SUPPLY CHAIN MANAGEMENT	1	2	3	4	5	
	PRACTICE ASSOCIATED WITH						
	PERFORMANCE						
1	Outsorcing						
	Focusing on core competencies						
	Cost-driven outsourcing through cost reduction						
	Improvement of service levels						
	Optimal level of outsourcing through cost reduction						
	Improvement of asset utilization						
	increase in operational flexibility						
2	2 Information communication technology						
	The firm applies current inventory management						
	technologies like, Vendor Managed Inventory						
	(VIM) and Electronic data interchange (EDI						
	The firm acquires and maintains appropriate						
	resources like; IT, training etc.						
	Advances in on-line information systems.						

	Top management support for research and					
	innovation and investments in current technology.					
	The firm provides training for employees to utilize					
	information system effectively					
	The firm has adopted Enterprise Resource					
	Systems (ERP) to improve its decision making					
	process					
3	Strategic partnerships					
	The firm collaborates with other firms and					
	stakeholders for information exchanges in various					
	aspects to improve service delivery					
	The firm works hand in hand with its suppliers to					
	ensure timely deliveries of services					
	The firm cooperates with its partners in					
	implementing its services					
	The firm shares their resources with its partners for					
	success					
	The firm creates and maintains good relationship					
	with their partners such as suppliers, distributors					
	and customers					
4	Customer relationship management					
	The firm manages customer needs and complaints					
	timely					

The firm ensures creation of long term relationships			
with its customers			
The firm ensures customer satisfaction through			
srvice delivery and ensuring that it responds to			
querries timely			

PART C: SUPPLY CHAIN PERFORMANCE

Indicate the extent to which the following supply chain performance measures are true in your organization

Please indicate on a Scale of 1-5 where: 1 = No Extent; 2 = Small extent; 3 = Moderate Extent;

4 = Large Extent; 5 = Very Large Extent

Organisational performance measures	1	2	3	4	5
costs of operations in the firm					
The firm is very flexible in terms of operation					
Able to provide a range of products and services					
The rate at which the firm manages any demand from the					
customers is high					
The firm is able to provide quality products and services					

APPENDIX II: List of humanitarian organizations based in Nairobi Organization Name

1	ADESO	34	Lutheran World Federation
2	ICRC	35	Merlin
3	IFRC	36	Norwegian Refugee Council
4	ILRI	37	Oxfam GB
5	IOM	38	Oxfam Novib
6	ACTED	39	People in Aid
7	Action against Hunger	40	Plan International
8	Action Aid	41	Practical Action
9	AMREF	42	Samaritan's Pulse Int'l Relief.
10	CAFOD	43	Save the Children
11	Care International	44	Solidarities
12	Caritas Switzerland	45	Tearfund
13	Catholic Relief Services	46	Transparency International
14	Child Fund Kenya	47	Trocaire Kenya
15	Christian AID	48	World Concern
16	Christian Blind Mission	49	World Vision International
17	Christian Children Fund	50	FAO ROEA
18	Christian Mission Aid	51	FAO Kenya
19	Concern Worldwide	52	OCHA
20	Danish Refugee council	53	UN Habitat
21	Feed the children	54	UNAIDS
22	Food for the Hungry	55	UNDP Kenya
23	German Agro Action	56	UNEP
24	Goal (K)	57	UNFPA
25	Handicap International	58	UNHCR Ken
26	Helpage International	59	UNHCR RSB
27	Hijra-Kenya Programme	60	UNICEF ESARO
28	Horn Relief	61	UNICEF Kenya
	International Institute of Rural		
29	Reconstruction (IIRR	62	UNWOMEN
30	International medical corps	63	WFP
31	International Rescue Committee	64	WHO
32	Islamic Relief		
33	Kenya Red Cross		