INTERNATIONAL LOGISTICS NETWORKS AND SUPPLY CHAIN VALUE CREATION OF AIRLINES IN KENYA

BY

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DECLARATION

I hereby certify that this research project is my original work and has not been presented for examination in any other university.

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

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DEDICATION

This work is dedicated to those who helped me carry out this research and to the almighty God for the wisdom and gift of life that has made me realize and see the conclusion of this research.

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First of all, I give thanks to the Lord for giving me good health to start and complete this project successfully, without Him, I would not have come this far.

To my supervisor Dr. Magutu. P. Obara, thank you for your dedication, suggestions, criticisms and timeless effort in guiding me throughout this proposal.

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ABSTRACT

Attributed to the expanding globalization of economic operations and fast advancement of ICT, organizations are looking to create and sort out vital, proficient and overall worldwide networks. This study sought to explore the development of the international logistics networks and supply chain value creation in Kenyan airline firms. The study adopted a descriptive cross sectional survey and included all the 44 airlines in the study hence a census. The study used primary data collected using a questionnaire. The researcher conducted a multiple regression analysis so as to determine the extent to which logistics network development practices affect supply chain value performance. The study found out that the firms had integrated its processes with suppliers, synchronized activities seamlessly, different departments are seamlessly connected to suppliers, actively coordinates with other, had standards that create similarity and homogeneity in its procurement, had a strong control instruments and regulations for global procurement, had flexibility in responding to changing demand requirements, had an effective customer relationship management system for suppliers and maintains a network of suppliers from all over the world. The results established various international logistics networks used by Airline firms in Kenya which included integrated processes with suppliers, synchronized activities, Linkages and customer relationship management system for suppliers and the international logistics networks adopted by the airline firms will in the long run determine their survival as they would have enhanced operations. The study recommends that the firms should adopt those networks that would guarantee them value creation in the competitive environment and at the same time they network with organizations that will provide high quality services which will enable the firms achieve the desired objectives.

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LIST OF ABBREVIATIONS AND ACRONYMS

FDI   Foreign Direct Investment

IATA   International Air Transport Association.

ICAO   International Civil Aviation Authority.

KAAO   Kenya Association of Air Operators.

KCAA   Kenya Civil Aviation Authority

KQ   Kenya Airways.

OECD   Organization of Economic cooperation and Development.

SPSS   Statistical Package for Social Sciences

CHAPTER ONE

INTRODUCTION

1.1 Background

A standout amongst the most critical results of globalization is spoken to by supply chains continuously turning out to be more universal and complex. Logistics networks improvement is a critical key choice that organizations must make to guarantee that required crude materials and segments can be appropriated productively from their providers to their assembling plants and distribution centers, and the last items to their clients universally. Fabbe-Costes and Colin (2003) refered to that associations need to build up a three stages approach in coordinations which are change of outbound which incorporates distribution, inner which is the production and inbound which is the supply streams. This prompts to the need to optimize total flow, and build up a general procedure for overseeing data and products flow and to structure an incorporated coordinations approach.

Keeping in mind the end goal to enhance the benefits accrued from Logistics to the end client at lowest cost and with the adaptability being high, organizations ought to build up their coordinations arranges so as to productively facilitate their exercises (Christofer, 1998).Global sourcing structures and procedures, including coordinations systems and exercises, turn out to be progressively critical to the viability of worldwide sourcing as it makes the need to effectively arrange intercontinental transportation (Peterson, 2000).

The idea of value chain creation is of principal significance and various researches have shown the main advantages it produces for clients, organizations and stakeholders (Christopher, 2005). The supplies practices which have meant to become responsive, to adjust after some duration with changes in the market and to adjust the premiums and to build up a maintainable upper hand. In particular, delicate supply chains can react both rapidly and cost viably in the rapid demand. A "good value chain "distinguishes the market auxiliary moves and alters production network outline and methodologies to adjust to the adjustments in the environment. Also, a conventional production network can change itself to a best value chain just in the event that it is equipped for aligning all the interests of all the chain members (Lee, 2004).

1.1.1 International Logistics Networks

Logistics alludes to the administration of the movement of crude materials, work in progress, completed merchandise, assets, parts, funds and data over the production network with a specific end goal to fulfill customer needs. It incorporates utilitarian exercises like transportation, stock administration, warehousing, material administration and packaging of products.

Logistics alludes to the arranging, negotiating and execution of supporting strategic courses of action between countries, their powers, and organizations. It incorporates outfitting strategic support (real end things, materiel, or services) to, or accepting calculated support from, at least one friendly outside governments, universal organizations, or military forces, with or without reimbursement (Stevenson and Spring, 2007). It incorporates arranging and activities identified with the use strategic

approaches, frameworks, or potentially methods to meet prerequisites of at least one outside governments, worldwide associations, or powers.

1.1.2 Supply Chain

The Supply Chain Council (1997) characterizes the supply chain as a movement that includes each effort required in creating and conveying products, from the supplier, to the producer and upto the end user. These endeavors require management and hence administration of these supply chains is essential.

Supply chain management idea is termed as organized, key coordination of the business practices both inside and outside the organization. This goes a long way in ensuring not only smooth operations, but also that the activities are conducted in a proper manner. This becomes advantageous to the business in terms of increased market share, enhanced operations, low operation cost and improved productivity (Mentzer,2001).

The best value supply chains don't plan to enhance one stand out supply chain trademark yet intend to improve the aggregate quality to the client (Ketchen, 2008) and to utilize supply chain as a way to make an upper hand and improve firm performance. In this manner, these supply chains exceed expectations in their execution in connection to an arrangement of focused needs and in the meantime, they make superior success (and competitive advantage).

1.1.3 Airline Firms in Kenya

The Kenyan airline firms industry has become throughout the years with an expansion popular for both local and domestic air travel. There are a number of 42 (Fourty two) residential airlines in Kenya (See Appendix I). A portion of the supply chain challenges that face residential carriers include: commercial Challenges, planning challenges, specialized extras difficulties, warehousing and distribution difficulties, Logistics and system support difficulties and catering services. The aviation industry is directed by the Kenya Civil Aviation Authority which was set up in 2002 by the Civil Aviation Amendment Act, 2002 as guided by the arrangements of the tradition on global common avionics. The KAAO was additionally established to advance, foster and secure the interests of those occupied with civil aviation or related enterprises in Kenya. Due to the delicate nature of the industry, the management ought to constantly come up with strategies so as to ensure maximum gain in the operations. Particularly, international logistics netweorks is being opted for due to the benefits it brings. However, its exact impact on the supply chain value creation is not well known.

1.2 Research Problem

Attributed to the expanding globalization of economic operations and fast advancement of ICT, organizations are looking to create and sort out vital, proficient and overall worldwide networks. Similarly, Beamon (1999) includes that in today's profoundly aggressive airline industry and in future, supply chain operations will reach a critical dimension. This has been rising throughout the years with the clients 'prerequisites and how they should be tended to. While Ebei (2000) takes note of that the traditional goal of

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an airline supply chain is to get the right material to the opportune place at the ideal time. The optional target has been to deal with the parts acquirement and supply chain as productively as could be expected under the circumstances.

Globally, various studies have been done on international logistics network and supply chains value creation. Bititci, Martinez, Albores and Parung (2004) wrote on making and overseeing value in collaborative networks. This exploration highlighted the various and entangled nature of the esteem exchanges in various sorts of communitarian ventures/systems. It is exhibited that system shared endeavors/systems can make another and remarkable esteem recommendations by supplementing, incorporating and utilizing each other's abilities and capabilities. OECD (2002) took a gander at transport coordinations by looking for shares answers for regular difficulties and notes that with the expanding globalization of financial action and quick improvement of ICT, organizations are trying to come up and compose vital, productive and overall systems. Upgrading production network execution has ended up one of the basic methodologies for maintaining upper hands for organizations (Cai et al., 2009). These systems, which are regularly alluded to as worldwide coordinations, concentrate on incorporating product sourcing, production and distribution.

Locally, Gituro and Awino (2007) did an empirical examination best practices of supply chain operations in private manufacturing firms. They set up 11 basic components as the best practices which include: operating policies, linkages inside supply chain firms, enhanced execution, data innovation frameworks, vital partnership, execution measures, objective introduction, customer relationships, connections, rules and strategies, supplier

choice and supplier assessment. Iraki (2009) examined supply chain network management at the University of Nairobi and established that the University utilized an assortment of supply chain practices in their journey to enhance productivity and viability in procurement. Mungatia (2010) analyzed supply chain practices Management in world vision Kenya. The study affirmed that World Vision Kenya oversees and reacts to disasters. World Vision Kenya additionally has a completely fledged disaster management and that disaster management methodology and techniques are set up.

Abdifatah (2012) examined management practices in supply chain and their effect on performance among humanitarian associations in Kenya. The findings found that keeping up great supplier connection, powerful and proficient insider operations, continuos improvement, adaptable creation forms, utilization of innovation to accelerate philanthropic work, between association combinations and straightforwardness in inner operations are among the practices common among compassionate associations in Kenya. Mulama (2012) completed a study to decide coordinations outsourcing rehearses on execution of expansive assembling firms in Nairobi. The study built up that the coordinations outsourcing rehearses received by the organizations were transportation administration, distribution center administration, material taking care of administration, data and stock administration.

From these global and local studies, it is evident that very few studies have focused on the development of the international logistics networks and supply chain value creation in the Kenyan airline firms industry. This study sought to explore the development of the international logistics networks and supply chain value creation in Kenyan airline firms.

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The study sought to address the following research question: how does the development of the international logistics networks and supply chains create value in Kenyan airline firms?

1.3 Research Objective

The study's objective was to assess the development of the international logistics networks and supply chains value creation in Kenyan airline firms.

1.3.1 Specific Research Objectives

The study aimed to answer the following research objectives

    i.   To determine the international logistics networks used by airline firms in Kenya.

    ii.   To determine how international logistic networks and the supply chain value creation of airline firms in Kenya relate.

1.4 Value of the Study

The findings obtained from the study would be helpful in providing information to existing and future organizations on assessment of the development of the international logistics networks and supply chain value creation of Kenyan airline firms. This study would also be beneficial to all Domestic Airlines since they would enhance the realization of international logistics networks and supply chain value creation in their operations. With a good Supplier, international logistics networks and supply chain value creation, domestic Airline's management can lower operational costs.

The study would help the policy makers within domestic Airlines to identify crucial areas in their organizations' supply chain and make appropriate decisions to improve their performance. Domestic Airlines can also improve margins through better coordination with international business partners and manufacturers of parts in their supply chain networks. Hence, improving the organization's overall performance and achievement of goals.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter is an audit of the important writing on international Logistics networks and supply chain value creation. It comprises of the hypothetical survey on the property rights approach, transaction cost theory and writings on logistics network development and supply chain value creation.

2.2 Theoretical Review

GHM was abridged to by Hart and Moore (1990), Hart (1995) and, Grossman and Hart (1986), built up the primary formal hypothesis that clarifies the expenses and advantages of combination in a unified mold. Their approach is regularly called the property rights approach. In their system, there is no ex post exorbitant wheeling and dealing: the gatherings take part in effective haggling ex post, understanding every one of the additions from exchange. Be that as it may, as a result of legally binding inadequacy and resource specificity, every investor can't gather all of the profits from the venture, and subsequently the level of investment is shy of efficient: there is an ex stake issue of underinvestment. Incorporation and outsourcing are distinctive as far as resource possession, which thusly decides how genuine the under venture issue is. It is imperative to note that under the property rights approach, reconciliation does not really resolve the holdup issue: The auxiliary decides its venture autonomously, expecting a portion of the profits will be appropriated by the organization head office, and consequently

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coordination has a tendency to experience the ill effects of underinvestment by the subsidiary. Today this approach has as often as possible been utilized as a part of the field of worldwide exchange request to clarify decision between global outsourcing and FDI.

The transaction cost theory, sets that there are expenses in utilizing a market. These expenses incorporate operational expenses (e.g. search costs) and legally binding expenses (e.g. expenses of composing, checking and upholding an agreement) (Gurbaxani and Whang, 1991). In spite of the fact that the association of monetary exercises relies on upon adjusting creation financial matters against the expenses of executing, the paradigmatic question of the hypothesis is the 'make-or-purchase' choice, in which streamlining of exchange cost is focal (Williamson, 1985).

Williamson's transaction cost theory thinks about the administration systems that can be utilized to accomplish economic proficiency and suggests that the ideal association structure is what minimizes exchange costs or the expenses of trade. Williamson recommends that four factors will influence such expenses, specifically: (i) recurrence of trade; (ii) resource specificity; (iii) natural vulnerability; and (iv) risk of advantage. Exchange expenses are vital while dissecting how supervisors settle on the outsourcing choice, however the confirmation from this case is that not all exchange expenses are incorporated into the choice, and that such expenses are more intricate than can be incorporated into the kind of examination regularly embraced by chiefs. Considering Williamson's factors, the examination demonstrates that the outsourcing of

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administrations did not consent exclusively with the levels of exchange recurrence or the necessity of benefit specificity. Likewise, sharp conduct was obvious with respect to all gatherings and was utilized as a part of a few cases as an explanation behind outsourcing, and in others to influence the choice to the supervisor's inclined decision (Anderson and Weitz, 1986).

An assortment of game plans were utilized to decrease environmental instability, for example, the exchange of staff to the temporary worker and the utilization of long haul contracts. In perspective of this hypothetical constraint, other deciding factors in the outsourcing system must be considered. At the point when firms outsource, they should think about how possible it is of affiliated favorable circumstances for their internal and relational capabilities. The acquainted favorable position would be the upper hand accomplished through a relationship between firms (Cheesley, 1997).

2.3 International Logistics Network

The networks in Logistics are more concerned in accomplishing a better practical adjustment to end-user necessities through suppliers- buyers' process integration. Production network management in these systems search for "consistent" procedures that raises the need for evaluation of operations, close association between segments of the supply chain and coordination between the different supply chain network individuals. The topic of logistics integration alludes to the exemplary coordination dilemma between chain of importance and market (Ellram, 1991).

The intergration of Logistics with other useful ranges will enable the organization understand its full potential, and to gain a critical competitive advantage (Christopher, 1989). This will be through the maintainance of proper standards and procedures done accordingly. Due to supply chains occurring between organizations, there is a need for coordination of characters and network of frameworks. However, since organizations don't take part in a solitary inventory network, they don't need to coordinate in simply one. Or maybe they mostly coordinate with different chains, which brings about what could be called semi combination. The numerous connections they create and the advancement of these connections rely on upon the activities in which they take an interest and prompt to the improvement of logistics systems structures whereby, they assume a crucial part (Fabbe-Costes, 2004).

The main issues that arise in corporate logistics are called off and erroneous data, deficient administrations and moderate but wasteful operations. Thus causing powerlessness to provide interlinked services, high working costs, and a high inaccurate rate (Mourits and Evers 1996). Due to the intensified competition, improving the supply chain has proven to be a very key tool in ensuring that the companies gain maximally from the operations, thus accruing competitive advantage. Additionally, data and reporting frameworks are key for any management framework, as they drive the decisions in view of the information gathered.

2.4 Value Creation

A supply chain is essentially a system of material handling cells with the accompanying qualities: supply, change, and demand (Davis, 1993). It aims at reducing the operation costs and thus saving on the operations conducted which can in turn be used in gaining competitive advantage. However, the decreased costs are just an end result as the supply chain intergration ensures overall improvement in the entire organization (Helper, 1991). In addition, it likewise speaks to an outlook change that expands one's appreciation for the ideas of co-operation and competition in such a business domain (Best, 1990). The improvement of the idea of the supply chain come up mainly in 1950s onwards of systems theory, and the related idea of holism of which numerous practices have come up since then.

2.4.1 Value creation in the Airline Industry

Airlines must handle spare parts, fuel, food and drink. Stock is managed to ensure reductions in stock turnover, stock outs, downtime of aircrafts. This reduces costs and wastage. Supply chain solutions that add value include-Warehousing-both in-house and outsourced, customer support, IT solutions for visibility, Tailored custom solutions for individual airline needs, Just in time delivery of supplies, Onsite warehouse management, Parts trading and/or repairs and exchange, consignment and leaseback programs, Inventory management, OEM parts accessibility, Availability of aircrafts and engines when needed.

2.5 Conceptual Framework

| Independent Variables | Dependent Variable |

International Logistics Networks

- Linkages within Supply chain firms
- Information Technology systems
- Customer relationships
- Strategic Alliances
- Customer relationships

Supply Chain Value Creation

- Cost reduction
- Sustainable competitive advantage
- Improved organisational performance
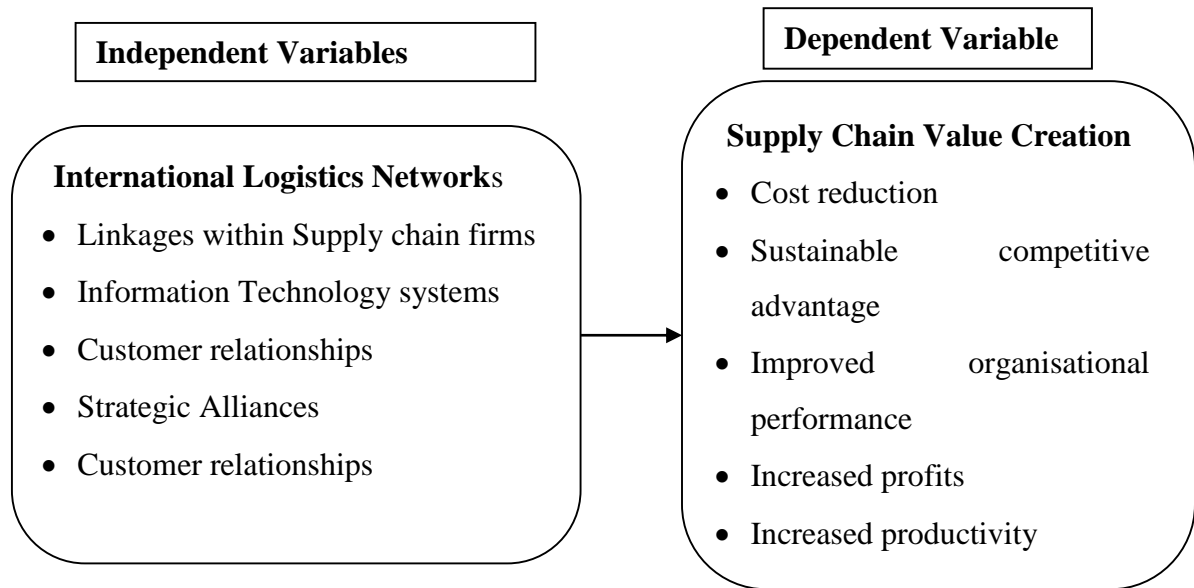- Increased profits
- Increased productivity

Figure 2.1: Conceptual Model

Source: Author, 2016

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes how the researcher conducted the study. Particularly it describes the procedure in the data collection and the analysis employed. As such, the chapter comprises of the research design, target population, data collection and analysis.

3.2 Research Design

The study adopted the descriptive cross sectional survey. The research design has been chosen since the study was not just concerned about the data description but also establishing the relationship between the variables (Mugenda and Mugenda, 2003). Additionally, the design was chosen as it ensures minimal interference with the research variables thus minimizing biasness. This enabled collecting the information exactly how it was at that particular time.

3.3 Population of Study

Since the population of the study is small, the study included all the 42 airlines in the study hence a census. (See appendix II)

3.4 Data Collection

The study used primary data. Primary data was collected using a questionnaire. The questionnaire comprised of open and closed ended questions. The target of this study were managers from the 42 domestic airlines in Kenya. The study collected information

from the logistics, Operations and Procurement managers from each airline. The questionnaire were carefully designed and pilot tested to ensure validity and accuracy in the data collection. The researcher administered the questionnaire to officers in charge of logistics in 42 airlines firms. The questionnaires were issued in person to give a high response rate. To ensure that the questionnaire collected valid and reliable data, the researcher reviewed the questionnaires with the supervisor so as to establish their appropriateness in responding to the research objectives.

3.5 Data Analysis

Data analysis entails obtaining meaningful information from the collected data. Before the responses were processed, the completed questionnaires were assessed for completeness to that they were consist. The data was then coded so to enable the grouping of the responses Data collected was then analyzed using SPSS and Microsoft Excel. The data findings were presented using tables and charts.

The following model was used so as to determine the extent to which logistics network development practices affect supply chain value performance:

$$Y = \beta_0 + \beta_1X_1 + \varepsilon$$

       Whereby Y = Supply chain value creation and performance

                       X_1 = international logistics networks

                       E = Error term

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the results and findings of the study based on the research objectives. The study sought to assess the development of the international logistics networks and supply chains value creation in Kenyan airline firms.

4.1.1 Response Rate

The study sampled managers from the 42 domestic airlines in Kenya. Out of the 42 distributed questionnaires, 31 were filled and returned. Thus, a response rate of 74%. This was appropriate as it was in line with Mugenda and Mugenda's (2003) who states that a response rate of 70% and above is excellent. The findings are presented in Figure 4.1.
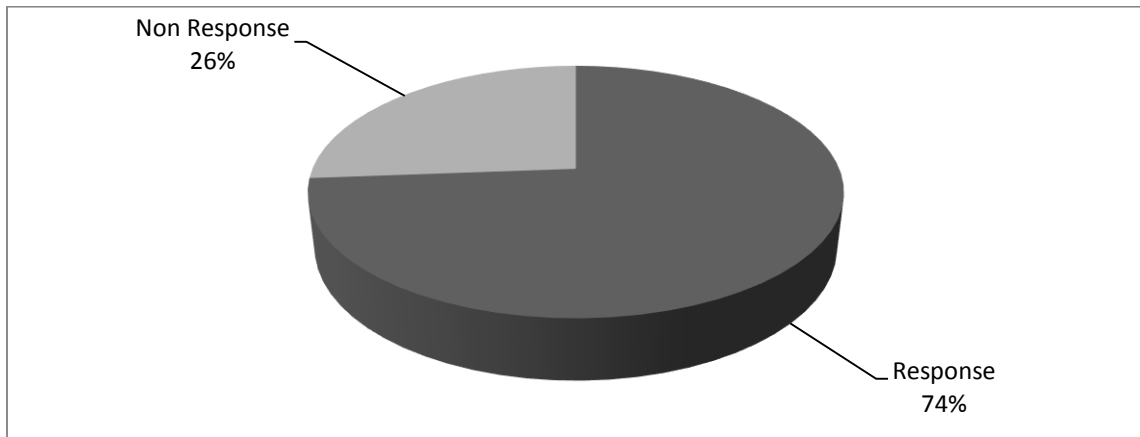

Figure 4.1: Response Rate

4.2 Demographic Information

The study aimed to establish the demographic data including number of years the Airline has been operational in Kenya, position in the Airline, period working with Aviation Industry in Kenya and number of employees in order to have an understanding of their suitability to undertake the study. The findings are in the subsequent sections.

4.2.1 Number of Years the Airline has been Operational in Kenya

The number of years the Airlines has been operational in Kenya refers to the period since the airlines were incorporated. The study sought to determine years the Airlines has been operational in Kenya. The findings are shown in Table 4.1.

Table 4.1: Number of Years the Airline has been Operational in Kenya

	Frequency	Percent
Below 3 years	12	38.7
4-6 years	11	35.5
7-9 years	4	12.9
10 Years and above	4	12.9
Total	**31**	**100.0**

As indicated in Table 4.1, 38.7% of the airlines had been operational in Kenya for a period of below 3 years, 35.5% for between 4-6 years, 12.9% for 7-9 years and 12.9% for 10 years and above. This shows that the airlines had been in operation in Kenya long enough hence develop international logistics networks and supply chains value creation thus the finding were relevant.

4.2.2 Position in the Airline

The position in the airline refers to various positions held by the respondents. This is a representation of the level of involvement in the operations. The finding is shown in Table 4.2.

Table 4.2: Position in the Airline

	Frequency	Percent
Logistics Manager	7	22.6
Operation Manager	15	48.4
Procurement Manager	9	29.0
Total	**31**	**100.0**

As shown in Table 4.2, 22.6% of the respondents were logistics managers, 48.4% were operation managers and 29.0% were procurement managers. This shows that the study covered across the positions and thus relevant data was provided.

4.2.3 Period Working with Aviation Industry in Kenya

Period working in the airline refers to number of years in employment in the organization. The study sought to determine the period of time the respondents had been in working the organization as a measure of their experience. The findings are shown in Table 4.3.

Table 4.3: Period Working with Aviation Industry in Kenya

	Frequency	Percent
Less than 4 years	12	38.7
4-10 years	11	35.5
11-15 years	7	22.6
above 15 years	1	3.2
Total	**31**	**100.0**

From the findings in Table 4.3, 38.7% of the respondents had been in working in the aviation industry in Kenya for a period of less than 4 years, 35.5% for between 4-10 years, 22.6% for between 11-15 years and 3.2% for above 15 years. This shows that the respondents had worked long enough thus knowledgeable of the operations.

4.2.4 Number of Employees

Number of employees refers to workers employed in the organization. The study sought to determine the number of employees in the airlines companies as an indication of their sizes. The finding is shown on Table 4.4.

Table 4.4: Number of Employees

	Frequency	Percent
Less than 20	1	3.2
Between 21-40	18	58.1
Between 41-60	9	29.0
More than 60	3	9.7
Total	**31**	**100.0**

As indicated in Table 4.4, 3.2% of the respondents indicated that they had less than 20 employees, 58.1% had between 21-40 employees, 29% had between 41-60 employees and 9.7% had more than 60 employees. This shows that the organizations had large capacity of employees thus the information collected was relevant for the study

4.3 International Logistics Networks Used by Airline Firms

Various international logistics networks used by Airline firms in Kenya were pointed out and the respondents were required to indicate the extent of adoption. The findings are shown on Table 4.5.

Table 4.5: International Logistics Networks Used by Airline Firms

	Mean	Std. Dev
Our company has an effective Customer Relationship management system for suppliers	3.48	1.234
Different departments are seamlessly connected to suppliers	3.67	.832
Our company has a strong control instruments and regulations for global procurement.	3.87	.957
Our company has flexibility in responding to changing demand requirements in the organization	3.90	.991
Our Company maintains a network of suppliers from all over the world	3.93	1.030
Our Company has synchronized activities seamlessly with its suppliers	4.09	.943
Our company has standards that create similarity and homogeneity in its procurement	4.12	.670
Our company has integrated its processes with suppliers	4.32	1.012
Our company actively coordinates with other companies in the supply chain (Linkages)	4.45	.767

To a very great extent (mean greater than 4 with a standard deviation greater than 0.5) the airline companies has synchronized activities seamlessly with its suppliers, has standards that create similarity and homogeneity in its procurement, has integrated its processes with suppliers and actively coordinates with other companies in the supply chain (Linkages). This finding concurs with that of Fawcett (1993) who explained how firms could attain competitive advantage through sourcing globally.

To a great extent (mean less than 4 with a standard deviation greater than 0.5) the airline has an effective Customer Relationship management system for suppliers, different departments are seamlessly connected to suppliers, has a strong control instruments and regulations for global procurement, has flexibility in responding to changing demand requirements in the organization and maintains a network of suppliers from all over the world. This finding concurs with that of Fabbe-Costes (2004) that nature and extent of logistics is highly dependant on the relationships created.

4.4 Supply Chain Value Creation

The respondents were required to indicate the status of the supply chain value creation parameters as far as their organization is concerned. The findings are shown on Table 4.6.

Table 4.6: Supply Chain Value Creation

	Mean	Std. Deviation
Sustainable competitive advantage	3.41	1.258
Increased productivity	3.48	1.207
Improved organisational performance	3.64	1.279
Increased profits	3.83	1.035
Cost reduction	4.06	1.181

To a great extent (mean less than 4 with a standard deviation greater than 0.5) the status of the supply chain value creation parameters as far as their organization is concerned were sustainable competitive advantage, increased productivity, improved organisational performance and increased profits. This finding is in line with the finding of Kitchen and Hult (2007) that the performance is best achieved through balancing these main priorities; cost, quality, speed and flexibility.

4.5 Regression Analysis

The study conducted a multiple regression analysis to assess the development of the international logistics networks and supply chains value creation in Kenyan airline firms. The study results are shown in the subsequent sections.

Table 4.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.719[a]	.517	.501	.01552

From the findings in Table 4.7, R was 0.719 meaning that there was a positive relationship between the variables. R^2 was 0.517 implying that only 51.7% of the dependent variable could be explained by the independent variable while only 48.3% of the variations were due to other factors. This implies that the regression model has very good explanatory and predictor grounds.

Table 4.8: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	29.598	1	29.598	31.102	.000[b]
Residual	27.598	29	.952		
Total	**57.196**	**30**			

From the findings on Table 4.8, the significance value is 0.000 which is less that 0.05 thus the model is statistically significant in predicting how international logistics networks affects supply chains value creation in Kenyan airline firms. This shows that the overall model was relevant.

Table 4.9: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.029	.208		.137	.892
International Logistics Networks	.539	.097	.719	5.577	.000

The established regression equation becomes;

$Y = 0.029 + 0.539X_1 + \varepsilon$

Where: Y= Supply chain integration, X_1= international logistics networks and ε = Error Term. From the findings of the regression analysis the factor (international logistics networks) was held constant, supply chain integration would be at 0.029. An increase in international logistics networks would lead to an increase in supply chain integration by 0.539. International logistics network was significant as the p-value was less than 0.05.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter provides the findings in summary, and it also gives the conclusions and recommendations of the study based on the study's objectives.

5.2 Summary of the Findings

The study found out that the companies had integrated its processes with suppliers, synchronized activities seamlessly with its suppliers, different departments are seamlessly connected to suppliers, actively coordinates with other companies in the supply chain (Linkages), had standards that create similarity and homogeneity in its procurement, had a strong control instruments and regulations for global procurement, had flexibility in responding to changing demand requirements in the organization, had an effective customer relationship management system for suppliers and maintains a network of suppliers from all over the world.

The study also established that there was a cost reduction, sustainable competitive advantage, improved organisational performance, increased profits and increased productivity.

5.3 Conclusion

The study concludes that the adopted international logistics networks by the airlines firms in Kenya had strengthen their resources in order to reinforce their competitive advantage. The results established various international logistics networks used by Airline firms in

Kenya which included integrated processes with suppliers, synchronized activities, Linkages and customer relationship management system for suppliers.

The firms opted to engage international logistics networks due to its positive impact to the organization and how much it boosts the operations in the firm. The international logistics networks employed will in the long run improve the productivity and also give the companies an upper hand in how they compete globally. Thus not only gaining competitive advantage but also having increased profits as an end result.

5.4 Recommendations

The study found out that the airlines firms had adopted international logistics networks that had enhanced supply chains value creation. It is therefore recommended that the firms should adopt those networks that would guarantee them value creation in the competitive environment and at the same time they network with organizations that will provide high quality services which will enable the firms achieve the desired objectives.

The study also found out that international logistics networks by the firms had influenced its performance and it recommends that the airline firms should continue adopting other international logistics networks which they do not have competitive advantage over its competitors so as to improve in supply chains value creation.

5.5 Limitations of the Study

The researcher encountered reluctance among target respondents in giving information. This is due to the delicate nature of the study topic. Particularly, the respondents feared that the information being sought after could be used for other purposes. The researcher

however countered this by assuring them that the information would be used solely for academic use. The other limitation was that the top management which comprised the target population of the study wasn't readily accessed. This is due to their busy schedules and long appointment queues. The researcher addressed this limitation by reaching out to them via the email which was more convenient.

5.6 Suggestions for Further Studies

The study confined itself to 42 domestic airlines in Kenya and the findings may not be an equal representation to other sectors. This is due to the uniqueness may be because of uniqueness of the airlines firms. It is therefore recommended that the study be replicated done to other sectors so as to enable generalization of the findings. Additionally, a similar study could be conducted at a different time span so as to establish whether the current logistics networks will still be in use.

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APPENDICES

APPENDIX I: LIST OF AIRLINES IN KENYA

1) 748 Air Services
2) Aberdair Aviation
3) Acariza Aviation
4) AD Aviation Charters
5) Aeronav Air Services
6) Aerospace Consortium
7) African Express Airways
8) Air Direct Connect
9) Air Traffic Africa
10) ALS-Aircraft Leasing Services
11) Astral Aviation
12) Avro Express
13) Blue Bird Aviation Services
14) Blue Sky Aviation Services
15) Capital Airlines(Kenya)
16) DAC East Africa
17) Fly540
18) Fly Sax
19) Freedom Airline Express
20) Global Airlift
21) Great Airways
22) Jambo Jet
23) Jubba Airways
24) KASAS
25) Kenya Airways
26) Kijipwa Aviation
27) Knight Aviation
28) Lady Rori
29) Mombasa Air Safari
30) Pan African Airways
31) Phoenix Aviation(Kenya)
32) Queensway Air Services
33) Ribway Cargo Airlines
34) Safari Express Cargo
35) Safarilink Aviation
36) Safe Air(Kenya)
37) Skytrail Air Safaris
38) Skyward international Aviation
39) Solenta Aviation Kenya
40) Tamarind Air
41) Transworld Safaris
42) Trident Aviation

Source: KCAA as at 30th June, 2016.

APPENDIX II: RESEARCH STUDY QUESTIONNAIRE

Date……………………………………………………

Please take a few minutes to complete this questionnaire.   All the information provided will be kept strictly confidential and will only be used for the purpose of this study. Kindly tick the appropriate response. In case of open-ended questions, write in the space provided.

SECTION A: DEMOGRAPHIC INFORMATION

(Please tick one box for each of the questions)

1. Name of the Airline (Optional)

2. Number of years the Airline has been operational in Kenya

    Below 3 years [   ]   4-6 years   7-9 years   [   ]

    10 Years and above   [   ]

3. Your position in the Airline _____

4. How long have you been working with Aviation Industry in Kenya?

Less than 4 years [   ]   4-10 years   [   ]

 11-15 years   [   ]   Above 15 years [   ]

5. How many employees are there in your organisation?

Less than 20   [   ]   Between 21-40   [   ]

Between 41-60 [   ]   Between 61-80   [   ]

More than 81   [   ]

SECTION B: INTERNATIONAL LOGISTICS NETWORKS USED BY AIRLINE FIRMS

6. The following are various international logistics networks used by Airline firms in Kenya. Rate the Extent to which each of these are applied in your organization on a scale of 1-5 where 1= very small extent, 2=small extent, 3= moderate extent, 4= great extent, 5= very great extent.

	1	2	3	4	5
Our company has integrated its processes with suppliers					
Our Company has synchronized activities seamlessly with its suppliers					
Different departments are seamlessly connected to suppliers					
Our company actively coordinates with other companies in the supply chain (Linkages)					
Our company has standards that create similarity and homogeneity in its procurement					
Our company has a strong control instruments and regulations for global procurement.					
Our company has flexibility in responding to changing demand requirements in the organization					
Our company has an effective Customer Relationship management system for suppliers					
Our Company maintains a network of suppliers from all over the world					

SECTION C: SUPPLY CHAIN VALUE CREATION OF AIRLINE FIRMS

7. Kindly indicate the status of the following supply chain value creation parameters as far as your organization is concerned. Use a scale of 1-5 where 1= very small extent, 2=small extent, 3= moderate extent, 4= great extent, 5= very great extent.

Value creation	1	2	3	4	5
Cost reduction					
Sustainable competitive advantage					
Improved organisational performance					
Increased profits					
Increased productivity					
Cost reduction					

THANK YOU