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**EFFECT OF PROCUREMENT OUTSOURCING ON PERFORMANCE OF
KENYA AIRWAYS LIMITED.**

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EFFECT OF PROCUREMENT OUTSOURCING ON PERFORMANCE OF KENYA AIRWAYS LIMITED

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Abstract

Purpose: The study sought to establish the effects of procurement outsourcing on performance of firms in the airline industry in Kenya with a focus on Kenya Airways Limited. The study specifically looked at the effect of purchasing functions outsourcing, transport and logistics services outsourcing, warehousing services outsourcing and procurement information systems management outsourcing on performance of firms in the airline industry with a focus on Kenya Airways Company Limited.

Methodology: The study was guided by Transaction Cost Theory, SCOR Model, the Principal Agency Theory and Resource Dependency Theory. A case study was adopted in the study as a research design and targeted 75 employees in procurement and logistics departments at Kenya Airways Company departments. The study adopted a census technique with respect to the unit of analysis which was Kenya Airways Company Limited. The study used both descriptive as well as inferential statistics for analysis. Descriptive statistics of frequency distributions, percentages and frequency tables were used while inferential statistics of correlation and regression analysis were employed using SPSS version 24.0 to establish the relationship between procurement outsourcing practices and performance of firms in the airline industry.

Results: The findings of the study revealed that purchasing functions outsourcing, transport and logistics services outsourcing, warehousing services outsourcing and procurement information system management outsourcing positively and significantly affect performance of firms in the airline industry.

Contributions to policy and practice: The study recommends that Kenya Airways Limited should focus on outsourcing purchasing functions since the practice positively and significantly affects performance of the firm. The study also recommends that Kenya Airways Limited should enhance transport and logistics outsourcing since the practice positively and significantly affects

performance of the firm. The study further recommends that Kenya Airways Limited should promote outsourcing of warehousing services since the practice positively and significantly affects performance of the firm. The study finally recommends that Kenya Airways Limited should enhance outsourcing of procurement information system management since the practice positively and significantly affects performance of the firm.

Key Words: *Purchasing Functions Outsourcing, Transport and Logistics Services Outsourcing, Warehousing Services Outsourcing, Procurement Information Systems Management Outsourcing and Performance of Firms*

1.0 INTRODUCTION

Lawrence (2011) defined procurement outsourcing as the process of transferring some activities related to procurement to third parties with an aim of managing costs as well as accomplishing procurement functions as expected. Through that, a company is able to focus on other key core activities which can improve the performance. Some of the activities which can be outsourced according to Lacity and Sauer (2017) are supplier management practices as well as requisitioning, procurement categorization, vendor management and IT-related activities. The same normally tends to be between 3 to 5 years of contracts. In most cases, Dhawan (2011) argued that procurement outsourcing involves a day to day transaction other than strategic procurement aspects.

However, there is an argument that in the modern era, most companies are shifting towards outsourcing more and more strategic procurement activities (Hackett Group (2011). In so doing, firms are able to come up with strong relationships between suppliers as well as other third parties which can be used to improve the value of the firms participating in the supply chain process (Joel, 2008). The advantages of procurement outsourcing are many ranging from enabling a firm to focus solely on developing and improving its core competencies. Furthermore, the outsourcing firm is able to reduce procurement costs as well as share risks (Lacity & Sauer, 2017). Other related advantages are improving productivity, improving the overall supply chain process, enhancing the quality of the goods and services and ensuring that customer care is well-coordinated (Lacity *et.al* 2017).

Lawrence (2011) argued that among the strategic procurement functions which firms are currently outsourcing in order to enhance competitive advantage and improve quality are related to warehousing activities, purchasing, transport functions as well as maintenance of the IT systems that manage procurement activities for a firm. In terms of outsourcing logistics functions, a firm may need another company to transport its hazardous products, air freight services and sea cargo services. For warehousing, a company may need another company to manage its storage, dispatching services as well as packaging services (Dhawan, 2011). Many reasons have been documented for the rapid increase in procurement outsourcing in the modern era. Among them is the need for enhanced profits margins when the third party makes purchases at a cheaper cost, insufficient resources and staff as well as procurement costs (Krause & Ellram, 2017). Companies such as the Kenya Airways Company Limited experience changes in the operating environment from time to time and can benefit greatly from engaging procurement outsourcing as one of their strategies. Due to the recent challenges in performance, the study

seeks to establish the extent to which the company has adopted procurement outsourcing and determine its influence on performance.

1.1 Global perspective of Procurement Outsourcing

Procurement outsourcing has gained ground globally as can be witnessed in companies such as IBM and Eastman Kodak. The companies outsourced management of their IT systems among other functions, the procurement functions. The companies then focused on improving their research and development. Even though the move drew criticism by the argument that outsourcing reduces a company's power, Dickson (2011) argued that these companies performed better in the long run due to outsourcing. In the Republic of Belarus, procurement outsourcing is not an old practice since it's believed to have started in the year 2002. This is because the country was not ready for structural changes and the workers were even more skeptical. However, due to its geographical position, the country is a good place to outsource as argued by Zaiceva *et al* (2014). Companies in Belarus have finally embraced procurement outsourcing due to the increasing market competitions in labor, goods and services making the production costs increase. To manage that, the companies have resorted to outsourcing their procurement functions. As a result, the need for outsourcing services has increased and as a result, the country has very few third-party logistics providers (Vakulich, 2014).

There is an argument that most successful companies in the United States of America have embraced procurement outsourcing as well as outsourcing of various functions including innovations services (Quinn, 2004). Some of the companies that have focused on procurement outsourcing are Dell computer and Cisco systems which have decided to focus on their key strength and outsource other services. As a result, they are among the best performing IT giants in the world (Quinn, 2004). Logistics in Finland is on a good level, but according to the logistics surveys, differences across the country continue to grow. The logistical situation in Southern Finland is better than elsewhere in the country. Western Finland is in the second place, then Northern Finland, and the last is Eastern Finland. This situation is existing because of a great difference between the transport infrastructures and population distribution. Also, there is a large distance between the south and north of Finland (Solakivi *et al*, 2014). In the context of Germany, a different approach to outsourcing has emerged where companies prefer to outsource not only procurement functions but also business processing outsourcing as a result of high production costs. It was argued that outsourcing of the two was not just pursued by firms experiencing high production costs, but also firms with better revenue margins which adopted the strategy to differentiate their markets (Fritsch & Wullenweber, 2007).

1.2 Statement of the Problem

The airline industry is important to the Kenyan economy through its contribution to employment creation as well as contribution to GDP through taxes. Furthermore, the industry facilitates integration, world trade and tourism (International Air Transport Association, 2016). According to IATA (2016), the industry contributed up to one percent of the country's GDP and has created more than forty thousand jobs to the Kenyan labor force and contributes more than four billion Kenya shillings in tax to the government (Kising'u, 2012). Furthermore, the sector contributes to other sectors such as tourism and agriculture. Since exports contribute up to 61% of the GDP, its reliance on the airline industry cannot be ignored. In terms of international employment, the airline industry employs up to 18,000 people yearly. The foreign tourists who come to Kenya

also spent their money that contributing to the economy and supporting an additional 410,000 per annum (KNBS, 2016). The success of this sector is hence critical to the economy of Kenya. However, as noted by Ng'ang'a, (2012), Kenya Airways Limited has continuously experienced performance inefficiencies resulting from a dynamic and competitive environment with several airline companies including those operating international routes and local routes having lately entered the Kenyan market and affected the airlines pricing strategy and ultimately its performance (Ochieng, 2015). Kenya Airways suffered a net loss of Sh 4.8 billion for the half-year period March-September 30, 2012 (NSE, 2012). In addition, there were declining financial figures registered during the remainder of the financial year which culminated in a 25% net profit loss as compared to the previous financial year (NSE, 2013). In the next year, turnover reduced by a 1B while Net profit was down by 46.7%. The company has ever since registered declining financial performance (Ochieng, 2015; NSE, 2016). Ochieng (2015) attributes some of the factors contributing to this poor performance to increasing supply chain costs arising from poor warehousing practices, inventory practices, and less thorough supplier selection practices during supplier evaluation and outsourcing which in turn leads to overvaluation of goods by suppliers and thus an increase in Procurement costs.

One of the solutions to poor firm performance is managing the supply chain costs through procurement outsourcing (Lacity *et.al* 2017). Procurement outsourcing offers companies such as Kenya Airways Limited the ability focus on their core competencies and gains access to leading external capabilities in non-core activities, improving the level of procurement performance and ultimately overall performance across all categories and activities without making large infrastructure investments (Lacity *et.al* 2017). In information systems management, for instance, the firm can outsource the maintenance of its, SCM system personnel, order processing systems, payment management system and its inventory control system. Procurement officers can outsource consultancy services on how to optimize productivity, reduce operational costs, increase supply chain visibility, and increase the quality of goods and services and how to improve customer care (Lacity *et.al* 2017). Kenya Airways Company Limited is already undergoing rapid changes due to changing internal and external pressures and may need to consider embracing procurement outsourcing as an operational strategy to reduce operating costs in order to improve its performance. The credibility of suppliers is critical for the success of the procurement outsourcing process which is determined by experience in required services, proven track record on implementation and operating similar contracts, financial strength and commitment to the contract (Lawrence, 2011). While many studies have not reflected the role played by procurement outsourcing practices on firm performance, especially at KQ, this study is timely. For instance the studies by Tabeni, (2006) on the impact of purchasing outsourcing on the operational performance, Klemola, (2013), On Purchasing Functions Analysis and Development, Nyokabi, (2012) on the impact of outsourcing the logistical function on firm performance by focusing the study on Safaricom Company limited and Claver, González, Gascó and Llopis, (2002) on information systems all focused on one element of outsourcing such as purchasing outsourcing logistics outsourcing failed to consider the same independent variables as the current study. This resulted to conceptual research gap. Previous studies such as a study by Marasco (2008) on Third-party logistics only reviewed journal papers while the current research is a descriptive case study on the influence of procurement outsourcing; a study by Nyokabi, (2012) on the impact of outsourcing the logistical function on firm performance at Safaricom

Company limited focused on telecommunication industry while the current study was based in the airline industry in Kenya ; a study by Tabeni (2006) focused on the impact of purchasing outsourcing on the operational performance in developed economies ; Klemola, (2013) focused on Purchasing Functions Analysis and Development while Claver, González, Gascó and Llopis, (2002) focused on information systems outsourcing thus presenting a conceptual knowledge because of focusing on one element of outsourcing other than considering a wide range of procurement outsourcing practices.

1.3 Objectives of the Study

- i. To examine the effect of purchasing functions outsourcing on performance of firms in the airline industry in Kenya
- ii. To determine the effect of transport and logistics services outsourcing on performance of firms in the airline industry in Kenya.
- iii. To establish the effect of warehousing services outsourcing on performance of firms in the airline industry in Kenya
- iv. To establish the effect of procurement information systems management outsourcing on performance of firms in the airline industry in Kenya

2.0 LITERATURE REVIEW

2.1 Theoretical Review

Transaction Cost Theory

Ronald Coase (1937) proposed the theory to explain how costs are involved in transactions of whichever nature based on information asymmetry between the parties involved. When an organization is implementing institutional arrangements with other organizations, transaction costs arise because to obtain information, the process is expensive. Costs also arise from contract enforcement and monitoring of the tasks. That is why transaction costs are referred to as according to Abdullah *et al.* (1988) the costs of collecting information and enforcing contracts. For a firm to perform better there is a need to ensure that the transaction costs are well managed. One of the ways of managing these costs is through enforcing the practice of outsourcing. Through outsourcing, a firm is able to save on its costs. The theory is relevant to the study in linking procurement outsourcing to performance by making it easy in reducing the costs as a result of transactions. It can specifically be linked to the outsourcing of systems that are used in communication and information sharing such as procurement information systems management since outsourcing of such leads to a reduction in transaction costs. Transaction Cost Theory, therefore, provides useful insights into the procurement information systems management outsourcing variable of this study. If the outsourcing of this activity is a success, it will lead to reduced transaction cost which leads to an improvement in performance.

2.2 Supply Chain Operations Reference Model

The SCOR model was proposed by the Supply Chain Committee in 1996 to provide a framework which links various supply chain processes to support communication and enhance supply chain performance. The model can be used to evaluate supply chain processes and align them accordingly in order to improve the efficiency of the supply chain processes (Lockamy & McCormack, 2004). The main pillars of the model were to plan, source, make and deliver and

argued that a supply chain process is said to be successful if it can manage those four activities. In relation to this study, the model provides an analysis of the need to integrate outsourcing in the supply chain process of KQ so as to attain high supply chain performance thus improving the overall firm performance. Among the key processes in a supply chain are inbound activities such as transport and logistics as well as warehousing, therefore the model can be used to explain the effect of warehousing outsourcing on performance.

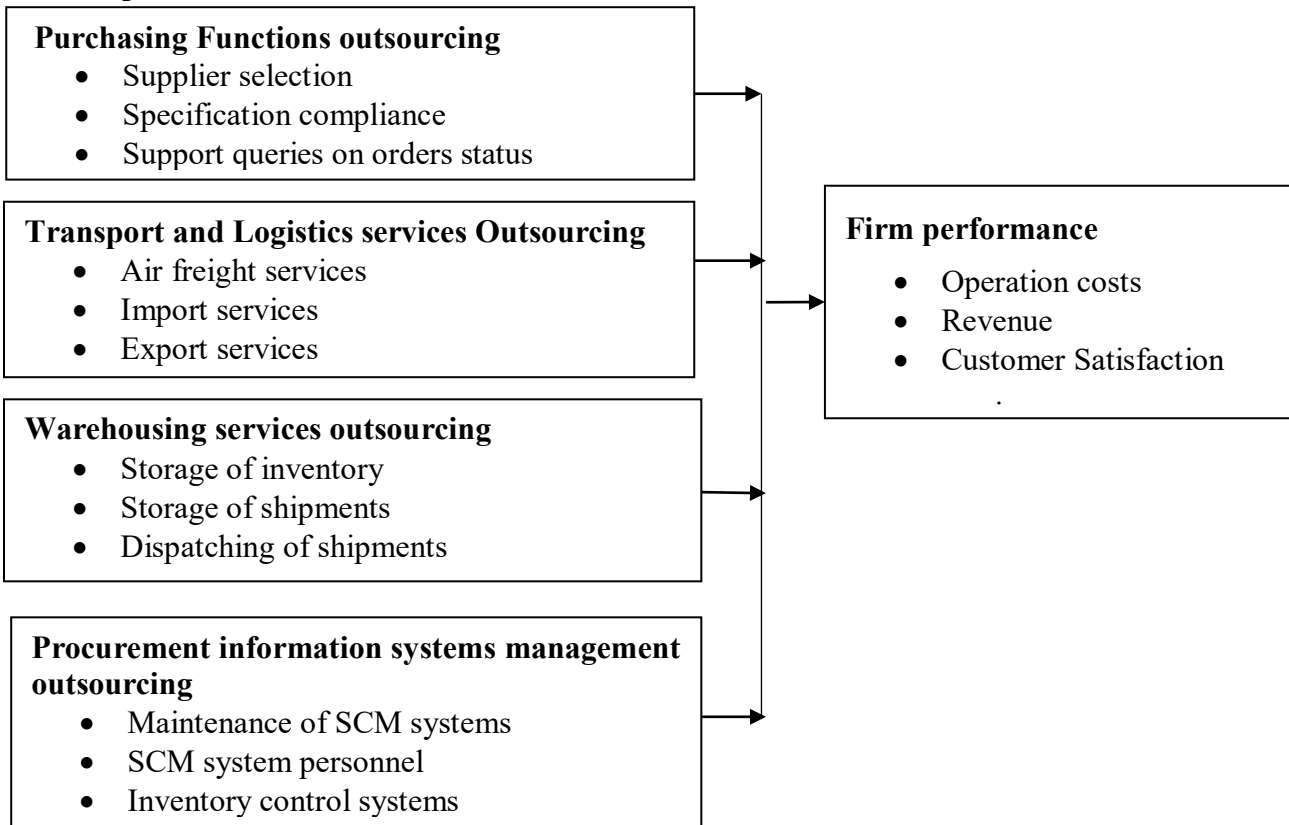
The Principal Agency Theory

The concept was introduced by Eisenhardt (1989) to explain the separation of roles between a principal and an agent. The theory argued that due to the relationship between the two, problems of conflicts of objectives would arise especially when one party, mostly the agent, pursued their own interest at the expense of the principle. To manage such conflicts, there is a need to have a contract which binds and demarcates the roles between the two as well as the expectations of each party (Eisenhardt, 1989). For that, there is a need to have a contract which includes both contract incentives and behavioral outcomes which can motivate the agent (Baiman & Rajan, 2012). The theory mostly explains the concept of outsourcing because the activities of the principle are conducted by the agent and hence to ensure effectiveness and enhanced performance, a good contract must be designed. The theory is relevant to the study as it explains how outsourcing can ensure there is better performance. According to the theory, the agent, who is the outsourced party, can ensure better performance when a good contract is drawn. When it comes to procurement practices such as transport and logistics, outsourcing can help reduce the risks involved in the process. The theory, therefore, expounds on the transport and logistics outsourcing independent variable of the study.

Resource Dependency Theory

Barney (1991) proposed the theory which argues that the resources which a firm has are critical in determining its competitive edge and performance. It is also argued that there is a need to acquire external support in ensuring that the internal resources are well put to task and utilized. According to Grant (1991), this process of acquiring external support is called “filling gaps” and can simply mean outsourcing. The Resource Dependency Theory posits that a firm will tend to outsource when it depends on critical resources such as labor, capital, information or market that are external to the firm. A firm will exploit internal and external resources as necessary in order to develop a competitive advantage (Grover *et al*, 1996). This theory is relevant to the current study as it explains the need for external acquisition of complementary resources through procurement which is necessary for a firm to improve on its performance. Specifically, when a firm lacks the necessary resources to perform, there is a need to look for them outside and therefore outsourcing is welcome. The theory, therefore, links to all the independent variables of the study including purchasing functions outsourcing.

2.3 Conceptual Framework



Independent variables

Dependent Variable

Figure 1: Conceptual Framework

Purchasing Functions outsourcing

Transfer of day to day activities related to buying which are normally managed by a central procurement organization is called Purchasing Functions outsourcing (Ellram, & Billington, 2011). The outsourced part manages purchasing functions on behalf of the company that outsourced. Among the activities managed is making orders and matching sales, selecting the suppliers on behalf of the company, support questions on the status of the orders as well as cataloging (Ellram, *et. al*, 2011). Pettit and Beresford (2015) on the other hand argue that purchasing functions outsourcing refers to the transfer of the practices related to purchasing and managing inventory. Even though companies adopt purchasing functions outsourcing, there is a need to have strong relationships with the suppliers despite the presence of third party logistics. When a firm has developed better relationships with the suppliers, it can ensure a better flow of goods thus ensuring customer satisfaction (Joel, 2008). Not all purchasing functions can be outsourced. A firm can decide to outsource some key activities such as negotiation, assessment of compliance to specifications as well as the accounting and paperwork services involving purchases (Bhimani, Lopes & Aquino, 2016). Other purchasing related activities such as supplier relationship management such as supplier evaluation can also be outsourced. Bhimani, *et.al* (2016) argued that where inventory auditing and tracking after purchases is required, a firm

can also outsource that function. In outsourcing purchasing activities, a firm is able to concentrate on its core activities and ensure competitive performance. Such firms can be able to monitor a reduction in purchase prices and costs (Contractor *et. al*, 2010).

Transport and Logistics Services Outsourcing

A firm can transfer logistics operations involving the transfer of resources previously performed within the organization to another party outside the organization in a process called Transport and Logistics Services Outsourcing (Qureshi, Dinesh, & Pradeep 2007). The management of transfer of resources from the point of manufacturing to the destination with the aim of meeting the requirements is called logistics management. When a firm doesn't have enough fleet to manage this function, there is a need to outsource in order to meet the customers' expectations (Qureshi, *et al.*, 2007). In the face of high competitive environment, many firms are focusing on outsourcing their procurement functions so as to focus on their key strengths. However, to ensure success, there is a need to integrate the information system of the 3PL company with that of the firm (Mulama, 2012). In the airline industry, outsourcing of transport and logistics function centers around export and import services, sea cargo shipping and air freight services (Lambert *et al.*, 2009). Among the advantages of outsourcing is increased flexibility, increased efficiency, reduce operational costs, ensure manageable lead times and improve the overall performance of the firm (Daugherty, 2011). Notably, the practice makes a firm be more competitive especially due to the freedom it gains to manage its core competencies.

Warehousing Services Outsourcing

Warehousing services outsourcing refers to the use of firms outside of the firm to manage the warehousing activities on its behalf. These third-party logistics functions can be full or selected functions. Some of the warehousing functions outsourced ranges from packaging, forwarding, distribution and kitting (Maltz, 2014). The third-party logistics firms are normally contracted to manage these activities and other activities including inventory management, tracking and tracing as well as management of the warehousing system (Cheng & Lee, 2010). A contract specifying the relationship between the two firms should have the activities to be conducted as well as the time period of engagement which in most cases should not go beyond a year (Cheng & Lee, 2010).

Procurement Information Systems Management Outsourcing

A firm is said to be outsourcing its procurement information systems management when it transfers the management of its procurement systems to another company that has better competence. It can also involve the supply and management of IT-related systems to manage procurement activities and the same can last for a short period of time or for a long period of time (Cardinali, 2008). IT systems outsourcing can include outsourcing of activities involving management of data centers, WAN systems, maintenance of the systems as well as computing and business process management (Lacity & Willcocks, 2008). A firm can outsource information systems management for the maintenance of its, SCM system personnel, order processing systems, payment management system and its inventory control system. Procurement officers can outsource consultancy services on how to optimize productivity, reduce operational costs, increase supply chain visibility, and increase the quality of goods and services and how to improve customer care (David, & Han, 2014; Lacity & Willcocks, 2015).

Firm performance

Karla (2011) defines performance as a firm achieving the targets and goals it intended to achieve. Some of the performance drivers are the customer value, ethics and process excellence. Steps of organizational performance initiative are: Evaluation, planning, implementing and continuity. Critical success factors consist of access to appropriate expertise, planning, creative solutions and flexible process management (Karla, 2011). Performance entails achievement of the set targets and goals within a set time period in an efficient and effective manner. The end result of a performed company are high profits margins, satisfied customers, production of quality products and increased market share (Rainey, 2009). It is consequently a reflection of the employee's productivity captured through financial and non-financial measures (García-Morales, Jiménez-Barrionuevo & Gutiérrez-Gutiérrez, 2012). Executives are mostly concerned about performance because the conditions of operations are always changing. To maintain high performance, firms are required to have strategies in place one of which is employing procurement outsourcing. It has been argued that through outsourcing of key practices, a firm is able to manage its costs, improve efficiency and ensure competitive advantage through focusing on its core competencies thus enhancing its overall performance (Hancox & Hackney, 2012).

3.0 RESEARCH METHODOLOGY

The study adopted a descriptive case study research design and targeted 75 employees in procurement and logistics departments at Kenya Airways Company departments who are directly involved with creating and implementing procurement outsourcing policies. The study adopted a census approach where all members of the target population were included in the study. The study used structured questionnaires to collect both qualitative and quantitative data. Inferential and descriptive statistics was used to analyze data. Results of the analysis were presented by use of tables and figures. The study used the following regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where; Y = Firm Performance, X_1 = Purchasing Functions outsourcing, X_2 = Transport and Logistics services Outsourcing, X_3 = Warehousing services outsourcing, X_4 = Procurement information systems management outsourcing, e = Error term and α = regression constant, β = coefficient of independent variables (unknown parameters to be determined).

4.0 RESULTS

The study administered 75 questionnaires where 64 questionnaires were filled and returned. This represented a response rate of 85.3%. The response rate was adequate for analysis as supported by Mugenda and Mugenda (2013) assertion that 50% response rate is justifiable for analysis and publishing while 60% is considered good with 70% and above considered to be very good.

4.1 Descriptive findings and analysis

Purchasing Functions Outsourcing

The study first requested respondents to indicate the frequency at which the firm outsourced purchasing functions from 2012 to 2016 using a scale of low, moderate and high. The results presented in table 1 shows in 2012, 3% of respondents indicated that the frequency of outsourcing the purchasing function by the firm was low, 21% indicated moderate while 76%

indicated high. In 2013, 13% of respondents indicate that the frequency of outsourcing the purchasing function was moderate while 87% indicate the frequency was high. In 2014, 21% of respondents indicated that the frequency was low, 60% indicated moderate while 19% indicated high. In 2015, 63% of respondents indicated that the frequency was low, 20% indicated moderate while 17% indicated high. Lastly, in 2016, 70% of respondents indicated that the frequency was low, 20% indicated that the frequency was moderate while 10% indicated that the frequency was high. According to the results, there has been a decline in outsourcing purchasing function from 2012 to 2016. This can be related to the nature of performance the firm have been experiencing from 2012 to 2016. When outsourcing purchasing functions was high in 2012 and 2013, statistics show that the firm was gaining profits but when the outsourcing started to decline from in 2014, 2015 and 2016, the firm started experiencing losses.

Table 1: Frequency of outsourcing purchasing functions

Year	Frequency of Purchasing Functions Outsourcing		
	Low	Moderate	High
2012	3%	21%	76%
2013	0%	13%	87%
2014	21%	60%	19%
2015	63%	20%	17%
2016	70%	20%	10%

The study further requested respondents to indicate their agreement levels with statements on purchasing function outsourcing using a scale of 1 to 5.

Table 2 Descriptive Statistics on Purchasing Function Outsourcing

Statements	Mean	Std.Dev
Kenya Airways Company Limited conducts supplier selection outsourcing	3.98	0.9
The company engages in outsourcing specification compliance services	4.02	0.87
Kenya Airways Company Limited is involved in outsourcing the evaluation of prices for freight and goods purchased	3.78	1.04
Kenya Airways Company Limited outsources negotiation services	3.69	1.19
Kenya Airways Company Limited outsources all paperwork and accounting services	3.49	1.36
Average	3.792	1.072

The results in table 2 shows that respondents were in agreement with statements that Kenya Airways Company Limited conducts supplier selection outsourcing (mean=3.98 and std.dev=0.9), that The company engages in outsourcing specification compliance services(mean=4.02 and std.dev=0.87), that Kenya Airways Company Limited is involved in outsourcing the evaluation of prices for freight and goods purchased (mean=3.78 and std.dev=1.04), and that Kenya Airways Company Limited outsources negotiation services

(mean=3.69 and std.dev=1.1.19). However, respondents were uncertain on whether Kenya Airways Company Limited outsources all paperwork and accounting services (mean= 3.49 and std.dev=1.36). On average, respondents were in agreement with the statements on purchasing functions outsourcing as indicated by average response mean of 3.792 and average std.dev of 1.072. This concurs with Hila and Dumitraşcu (2014) findings which established that outsourcing was a commonly done strategy and the performance of the practitioners was more superior to that of those companies that did not.

Transport and Logistics Services Outsourcing

The study first requested respondents to indicate the frequency at which the firm outsourced transport and logistics services from 2012 to 2016 using a scale of low, moderate and high. The results presented in table 3 shows in 2012, 7% of respondents indicated that the frequency of outsourcing the transport and logistics services by the firm was low, 20% indicated moderate while 73% indicated high. In 2013, 10% of respondents indicate that the frequency of outsourcing transport and logistics services was low, 14% indicated moderate while 76% indicate the frequency was high. In 2014, 25% of respondents indicated that the frequency was low, 64% indicated moderate while 11% indicated high. In 2015, 69% of respondents indicated that the frequency was low, 19% indicated moderate while 12% indicated high. Lastly, in 2016, 75% of respondents indicated that the frequency was low, 15% indicated that the frequency was moderate while 10% indicated that the frequency was high. The results show a decline in the frequency of outsourcing transport and logistics services by the firm from 2012 to 2016.

Table 3: Frequency of outsourcing purchasing functions

Year	Frequency of Transport and Logistics Services Outsourcing		
	Low	Moderate	High
2012	7%	20%	73%
2013	10%	14%	76%
2014	25%	64%	11%
2015	69%	19%	12%
2016	75%	15%	10%

The study further requested respondents to indicate their agreement levels with statements on transport and logistics services outsourcing in a scale 1 to 5. The findings in table 4 shows that respondents were in agreement with statements that Kenya airways company limited has considered outsourcing air freight services (mean=4.03 and standard deviation=0.86), that Kenya airways is currently outsourcing import services (mean=3.99 and standard deviation=0.96), that Plans are underway at Kenya airways company limited to outsource sea cargo shipping (mean=3.98 and stands deviation=0.96), that Kenya airways is currently outsourcing export services (mean=4.01 and stands deviation=0.87) and that The company authorizes the outsourcing of transport services for goods deemed to be hazardous (mean=4.11 and std.dev=0.8). On average, respondents were in agreements with statements pertaining to transport and logistics services outsourcing as depicted by an average mean of 4.024 and average Std. Dev of 0.89. The findings concur with Daugherty (2011) who revealed that outsourcing

increases flexibility, efficiency, reduces operational costs, ensure manageable lead times and improves the overall performance of a firm.

Table 4 Descriptive Statistics on Transport and Logistics Services Outsourcing

Statements	Mean	Std.Dev
Kenya Airways company limited has considered outsourcing air freight services	4.03	0.86
Kenya Airways is currently outsourcing import services	3.99	0.96
Plans are underway at Kenya airways company limited to outsource sea cargo shipping	3.98	0.96
Kenya Airways is currently outsourcing export services	4.01	0.87
The company authorizes the outsourcing of transport services for goods deemed to be hazardous	4.11	0.8
Average	4.024	0.89

Warehousing Services Outsourcing

Respondents were first requested to indicate the frequency at which the firm outsourced warehousing services from 2012 to 2016 using a scale of low, moderate and high. The results presented in table 5 shows in 2012, 9% of respondents indicated that the frequency of outsourcing the warehousing services by the firm was low, 9% indicated moderate while 82% indicated high. In 2013, 11% of respondents indicated that the frequency of outsourcing warehousing services was low, 11% indicated moderate while 78% indicated the frequency was high. In 2014, 20% of respondents indicated that the frequency was low, 55% indicated moderate while 25% indicated high. In 2015, 70% of respondents indicated that the frequency was low, 15% indicated moderate while 15% indicated high. Lastly, in 2016, 78% of respondents indicated that the frequency was low and 22% indicated that the frequency was moderate. The results show a declining trend in outsourcing warehousing services by the firm between the five years under review.

Table 5: Frequency of Warehousing Services Outsourcing

Year	Frequency of Warehousing Services Outsourcing		
	Low	Moderate	High
2012	9%	9%	82%
2013	11%	11%	78%
2014	20%	55%	25%
2015	70%	15%	15%
2016	78%	22%	0%

The study further requested respondents to indicate their agreement levels with statements on warehousing services outsourcing in a scale 1 to 5. The findings in table 6 shows that respondents were in agreement with statements that Kenya Airways Company Limited is currently outsourcing the storage of its craft materials and inventory (mean=4.11 and standard

deviation=0.81), that Kenya Airways Company Limited outsources storage for goods for shipping (mean=4 and standard deviation=0.88), that Kenya Airways Company Limited outsources storage of intermediary goods (mean=4 and stands deviation=0.88), and that Kenya Airways Company Limited is currently outsourcing the storage of finished goods (mean=3.98 and stands deviation=0.95). However, respondents were undecided on whether Kenya Airways Company Limited outsources processing of orders (mean=3.36 and std.dev=1.36) and whether Kenya Airways Company Limited is outsourcing dispatching of orders (mean=3.45 and std.dev=1.21). On average, respondents were in agreements with statements pertaining to warehousing services outsourcing as depicted by average mean of 3.82 and average std.dev of 1.015. The findings concur with Nyokabi (2012) findings which revealed existence of positive relationship between outsourcing and overall operational efficiency of a firm.

Table 6 Descriptive Statistics on Warehousing Services Outsourcing

Statement	Mean	Std.Dev
Kenya Airways Company Limited is currently outsourcing the storage of its craft materials and inventory	4.11	0.81
Kenya Airways Company Limited outsources storage for goods for shipping	4	0.88
Kenya Airways Company Limited outsources storage of intermediary goods	4	0.88
Kenya Airways Company Limited is currently outsourcing the storage of finished goods	3.98	0.95
Kenya Airways Company Limited outsources processing of orders	3.36	1.36
Kenya Airways Company Limited is outsourcing dispatching of orders	3.45	1.21
Average	3.82	1.015

Procurement Information System Management Outsourcing

Respondents were first requested to indicate the frequency at which the firm outsourced procurement information system management outsourcing from 2012 to 2016 using a scale of low, moderate and high. The results presented in table 7 shows that in 2012, 30% of respondents indicated that the frequency of outsourcing procurement information system management by the firm was low, 31% indicated moderate while 39% indicated high. In 2013, 32% of respondents indicated that the frequency of outsourcing procurement information system management was low, 36% indicated moderate while 32% indicated the frequency was high. In 2014, 29% of respondents indicated that the frequency was low, 42% indicated moderate while 29% indicated high. In 2015, 50% of respondents indicated that the frequency was low, 25% indicated moderate while 25% indicated high. Lastly, in 2016, 48% of respondents indicated that the frequency was low and 25% indicated that the frequency was moderate while 27% indicate high. The results show a varying trend in procurement information system management outsourcing by the firm in the years under review.

Table 7: Frequency of Procurement Information Systems Management Outsourcing

Year	Frequency of Procurement Information Systems Management Outsourcing		
	Low	Moderate	High
2012	30%	31%	39%
2013	32%	36%	32%
2014	29%	42%	29%
2015	50%	25%	25%
2016	48%	25%	27%

The study further requested respondents to indicate their agreement levels with statements on procurement information system management outsourcing using a scale of 1 to 5. The results presented in table 8 shows that respondents were in agreement with statements that Kenya Airways Company Limited is currently involved in outsourcing maintenance of SCM systems (mean=3.88 and standard deviation=0.98), that Kenya Airways Company Limited outsources SCM system personnel (mean=3.75 and standard deviation=1.06), that Kenya Airways Company Limited outsources inventory control systems (mean=3.78 and stands deviation=1.04), and Kenya Airways Company Limited has an effective system of outsourcing order processing processes (mean=3.96 and stands deviation=0.9). However, respondents were undecided on whether Kenya Airways Company Limited outsources payment management system (mean=3.48 and std.dev=1.38). On average, however, respondents were in agreements with statements pertaining to procurement information system management outsourcing as depicted by an average mean of 3.77 and average std.dev of 1.072. The findings concur with Marasco (2008) who established that a firm that outsources management of Information Systems realizes its IT related goal, reduces operational and maintenance costs and improves its efficiency.

Table 8 Procurement Information System Management Outsourcing

Statement	Mean	Average
Kenya Airways Company Limited is currently involved in outsourcing maintenance of SCM systems	3.88	0.98
Kenya Airways Company Limited outsources SCM system personnel	3.75	1.06
Kenya Airways Company Limited outsources inventory control systems	3.78	1.04
Kenya Airways Company Limited has an effective system of outsourcing order processing processes.	3.96	0.9
Kenya Airways Company Limited outsources payment management system	3.48	1.38
Average	3.77	1.072

4.2 Firm Performance

Operational Costs

The results presented in table 9 shows that in 2012, all respondents indicated that the firm's operational costs had reduced by over Ksh 150 Million. In 2013, all respondents indicated that the firm's operational costs had reduced by between Ksh.101 million and Ksh 150 million. In 2014, the firm's operational costs had reduced by between Ksh. 50million and Ksh.150million. In 2015 and 2016, respondents indicated that the operational costs had reduced by below Ksh.50million. The results implies that the firm have been experiencing an increased operational costs in the five years under review.

Table 9 Level of Reduction in Operational Costs

	Below Ksh. 50 million	Ksh.50 million	-Ksh.100	Ksh.101- million	Ksh.150	Above Ksh. 150 million
2012	-	-	-	-	-	100%
2013	-	-	-	100%	-	-
2014	-	100%	-	-	-	-
2015	100%	-	-	-	-	-
2016	100%	-	-	-	-	-

Revenue

The results presented in table 10 shows that the firm generated revenue of above Ksh. 20billion in 2012 while in 2013, the firm generated revenues of between Ksh 10 billion and 20 billion. In 2014, 2015 and 2016, the firm generated revenues of less than Ksh 10 billion. The results show that the amount of revenues generated by the firm have been declining from 2012 to 2016.

Table 10 Changes in Revenues Generated

	Below Ksh.10Billion	Ksh. 10billion - Ksh.20billion	Above Ksh 20 Billion
2012	-	-	100%
2013	-	100%	-
2014	100%	-	-
2015	100%	-	-
2016	100%	-	-

Customer Satisfaction

Table 11 Changes in Customer Satisfaction Margins

	Below 20%	20%-40%	41%-60%	Above 60%
2012	-	-	100%	-
2013	-	-	100%	-
2014	-	-	-	100%
2015	-	-	-	100%
2016	-	-	-	100%

The results presented in table 11 shows that the levels of customer satisfaction in 2012 and 2013 ranged between 41% and 60% while in 2014, 2015 and 2016, the level of customer satisfaction was above 60%. This implies that the firm has been satisfying the needs of the customers in the past five years under review.

4.3 Inferential Statistics

Correlation Results

Table 12 Correlation Analysis

		Purchasing Function Outsourcing	Transport and Logistics Service Outsourcing	Warehousing Service Outsourcing	Procurement Information System Management Outsourcing	Firm Performance
Purchasing Function Outsourcing	Pearson Correlation	1				
	Sig. (2-tailed)					
Transport and Logistics Service Outsourcing	Pearson Correlation	0.131	1			
	Sig. (2- tailed)	0.274				
Warehousing Service Outsourcing	Pearson Correlation	0.018	0.178	1		
	Sig. (2- tailed)	0.461	0.175			
Procurement Information System Management Outsourcing	Pearson Correlation	0.354	0.089	.341*	1	
	Sig. (2- tailed)	0.059	0.464	0.016		
Firm Performance	Pearson Correlation	.332*	.401**	.235**	.422**	1
	Sig. (2- tailed)	0.012	0.001	0.010	0	
	N	64	64	64	64	64

The results in table 12 show that the correlation between purchasing function outsourcing and performance of the firm is 0.322 and a p-value 0.012. This indicates that the correlation is positive and significant implying that an increase in the practices of outsourcing purchasing functions leads to increased performance of the firm. The findings are consistent with Hila and Dumitraşcu (2014) findings which established that outsourcing was a commonly done strategy

and the performance of the practitioners was more superior to that of those companies that did not. The results further indicate that the correlation between transport and logistics service outsourcing and performance of the firm is 0.401 and a p-value = 0.001. These results mean that the correlation is positive and significant implying that an increase in practices of outsourcing transport and logistics services leads to an increase in performance of the firm. The findings concur with Daugherty (2011) who revealed that outsourcing increases flexibility, efficiency, reduce operational costs, ensure manageable lead times and improves the overall performance of a firm.

The results of correlation analysis also show that the correlation between warehousing services outsourcing and firm's performance is 0.235 and a p-value of 0.010. This means that the correlation is positive and significant implying that an increase in practices of outsourcing warehousing services leads to an increase in the performance of the firm. The findings are consistent with Nyokabi (2012) findings which revealed the existence of a positive relationship between warehousing services outsourcing and overall operational efficiency of a firm. The correlation analysis results finally show that the correlation between outsourcing procurement information system management and performance of the firm is 0.422 and a p-value =0.000. These results mean that the correlation is positive and significant implying that increasing the practices of outsourcing procurement information system management leads to increased performance of the firm. The findings concur with Marasco (2008) who established that a firm that outsources management of Information Systems realizes its IT-related goal, reduces operational and maintenance costs and improves its efficiency which culminates to improved general performance.

Multiple Regression Analysis

The multiple regression analysis results presented in table 13 shows that there exist a strong relationship between outsourcing purchasing functions, transport and logistics services, warehousing services and procurement information system management and performance of firm as indicated by the value of $R = .601$. The model also indicated that the value of R-squared which is the coefficient of determination was .581 implying that 58.1% of variation in the firm's performance can be explained by outsourcing purchasing functions, transport and logistics services, warehousing services and procurement information system management.

Table 13: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.601 ^a	0.581	0.564	0.120

The results of ANOVA presented in table 14 shows that the overall model linking purchasing functions outsourcing, transport and logistics services outsourcing, warehousing services outsourcing and procurement information system management outsourcing with performance of the firm was statistically significant. The significance levels are confirmed by comparing the value of F critical at (4, 59) and F calculated value. The value of calculated $F = 11.7945$ while of

F critical value=2.5252. The F calculated value is more than the F critical value confirming the statistical significance of the model.

Table 14 ANOVA (Model Significance)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.444	4	0.861	11.7945	0.001
Residual	4.331	59	0.073		
Total	7.473	63			

The results of the model of coefficient presented in Table 15.

Table 15 Model Coefficients

Predictors	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	0.301	0.111		2.712	0.012
Purchasing Function Outsourcing	0.322	0.232	0.301	1.388	0.009
Transport and Logistics Service Outsourcing	0.401	0.101	0.301	3.970	0.000
Warehousing Service Outsourcing	0.344	0.289	0.745	1.190	0.010
Procurement Information System Management Outsourcing	0.389	0.164	0.282	2.372	0.002

Table 15 shows that purchasing function outsourcing has a positively and significantly affects firm's performance as shown by $\beta = 0.322$ and $\text{Sig} = 0.009 < 0.05$. The result implies that a unit change in purchasing function outsourcing practices results to an increase of 0.322 units on the performance of the firm. The findings are consistent with Hila and Dumitraşcu (2014) findings which established that outsourcing purchasing functions was a commonly adopted strategy that tends to improve the performance of firms adopting the strategy. The model of coefficient further shows that transport and logistics services outsourcing positively and significantly affects performance of the firm as shown by $\beta = 0.401$ and $\text{Sig} = 0.000 < 0.05$. This implies that a unit change in transport and logistics services outsourcing practices results to an increase of 0.401 units on performance of the firm. The findings concur with Brewer, Ashenbaum and Ogden (2013) on their study which sought to link logistics outsourcing and performance and established that logistics outsourcing was crucial in enhancing performance of firms. The model of coefficient also shows that warehousing services outsourcing positively and significantly affects firm's performance as shown by $\beta = 0.344$ and $\text{Sig} = 0.010 < 0.05$. This implies that a unit change in practices involving warehousing services outsourcing results to an increase of 0.344 units on performance of firm. The findings are consistent with Maltz, (2014) who sought to establish the significance of outsourcing of warehousing on attaining improved performance and revealed a positive effect. The model of coefficient finally indicates that procurement information system management outsourcing positively and significantly affects firm's performance as shown by $\beta = 0.389$ and $\text{Sig} = 0.002 < 0.05$. This implies that a change in a unit of practices on procurement information system management outsourcing results in an increase of 0.0.389 units on the firm's

performance. The findings concur with Marasco (2008) who established that a firm that outsources management of Information Systems realizes its IT-related goal, reduces operational and maintenance costs and improves its efficiency which culminates to improved general performance.

The optimal linear regression model for the study therefore becomes:

$$\text{Firm Performance} = 0.301 + 0.401(\text{Transport and Logistics Service Outsourcing}) + 0.389(\text{Procurement Information System Management Outsourcing}) + 0.344(\text{Warehousing Service Outsourcing}) + 0.322(\text{Purchasing Function Outsourcing})$$

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study findings led to conclusions that purchasing functions outsourcing positively and significantly affects performance of Kenya Airways Limited. The study further established that practices such as conducting supplier selection outsourcing, engaging in outsourcing specification compliance services, being involved in outsourcing the evaluation of prices for freight and goods purchased, outsourcing negotiation services and all paperwork and accounting services positively and significantly affects performance of Kenya Airways Limited. The study findings led to conclusions that transport and logistics services outsourcing positively and significantly affects performance of Kenya Airways Limited. The study further established that practices such as outsourcing air freight services, import services, sea cargo shipping, export services and authorizing the outsourcing of transport services for goods deemed to be hazardous positively and significantly affects performance of Kenya Airways Limited. The study findings further led to conclusions that warehousing services outsourcing positively and significantly affects performance of Kenya Airways Limited. The study further established that practices such as outsourcing storage of craft materials and inventory, storage for goods for shipping, storage of intermediary goods, storage of finished goods, processing of orders and dispatching of orders positively and significantly affects performance of Kenya Airways Limited. The study findings further led to conclusions that procurement information system management outsourcing positively and significantly affects performance of Kenya Airways Limited. The study further established that practices such as involved in outsourcing maintenance of SCM systems, SCM system personnel, inventory control systems, having an effective system of outsourcing order processing processes and outsourcing payment management system positively and significantly affect performance of Kenya Airways Limited.

5.2 Recommendations for the Study

The study recommends that Kenya Airways Limited should focus on outsourcing purchasing functions since the practice positively and significantly affects performance of the firm. The firm can achieve by conducting supplier selection outsourcing, engaging in outsourcing specification compliance services, being involved in outsourcing the evaluation of prices for freight and goods purchased, outsourcing negotiation services and all paperwork and accounting services. The study also recommends that Kenya Airways Limited should enhance transport and logistics outsourcing since the practice positively and significantly affects performance of the firm. This can be achieved by carrying out practices such as outsourcing air freight services, import services, sea cargo shipping, export services and authorizing the outsourcing of transport

services for goods deemed to be hazardous. The study further recommends that Kenya Airways Limited should promote outsourcing of warehousing services since the practice positively and significantly affects the performance of the firm. The airline can achieve this by outsourcing storage of craft materials and inventory, storage for goods for shipping, storage of intermediary goods, storage of finished goods, processing of orders and dispatching of orders. The study finally recommends that Kenya Airways Limited should enhance outsourcing of procurement information system management since the practice positively and significantly affects performance of the firm. The airline can achieve this by endeavoring in practices such as being involved in outsourcing maintenance of SCM systems, SCM system personnel, inventory control systems, having an effective system of outsourcing order processing processes and outsourcing payment management system.

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