

The Effect of E-Procurement on the Performance of Procurement Functions at Skyward Express Limited

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Abstract: *In any organization procurement of products usually occurs in a daily basis, and the process is usually affected by several factors. Procurement is a process and start by identification of the need or desire to have something, then scanning the environment to know where the resources can be obtained and the process includes knowing when, where and how to get these resources. Hence the study seek to establish the effect of E-procurement adoption on the performance of procurement functions at Skyward Express limited. It focused a lot on the following specific objectives; to examine the effect of web-based Enterprise Resource Planning on the performance of procurement functions, determine the effect of Electronic maintenance, repair and operations on the performance of procurement functions and to establish effect of E-sourcing on the performance of procurement functions. This study adopted a descriptive research design. The target population of this study consisted of the 51 employees directly involved in procurement activities of the organization. The study adopted census where all 51 respondents were engaged in the study. Primary data was collected using structured questionnaires. Analysis and interpretation of the data was done using both qualitative and quantitative methods according to research objectives and research questions. The data collected was summarized, classified, tabulated and analyzed qualitatively. Data presentation was inform of charts, graphs and table and the findings suggested web-based Enterprise resource planning, Electronic maintenance, repair and operations, E-sourcing significantly affect the performance of the organization, the study also establishes the relationship between the variables and how they are linked to the findings . Later the conclusion was drawn giving a room for the suggestion for more studies to be done on the conceptual area.*

Keywords: E-procurement, financing, organizational culture, performance of procurement functions. Skyward Express Kenya.

1. Introduction

Procurement is the attainment of products or services at the most advantageous cost as possible to the right amount and quality of a given product or service. Procurement has a wide scope when compared to purchasing being defined as the purchase of materials and services from outside organization to support the organization operations from production to marketing sales and logistics Jennings, (2001). Procurement process endeavor at forestalling needs, sourcing and obtaining supplies, movements of the products into the organization, and assessing the status of supplies as a current asset (Hardaker & Graham, 2000).

Procurement is the business management function that ensures identification, sourcing, access and management of the external resources that an organization needs or may need to fulfill its strategic objectives. Procurement nowadays plays a strategic role in the landscape of the modern business. Globalisation, Broadening product range, altering customer demands and economic pressure require to bridge the interests of external and internal business needs by revising approach to value chain concept and accepting the consolidating power of procurement with respect of the modern business organisation. Today, purchasing-supply process has become a value-contributing integral process. It is capable to affect both top and bottom line and is closely related to the technological solutions that enable to effectively deal with risk and information management issues, optimize end-to costs in value co-creation process, (Jennings, 2001). Globalizing companies respond to the challenges of organizational performance through the implementation of procurement functions (Otieno, Ondiek, & Odera, 2012). Procurement functions provides the right metrics and key performance indicators that can be of help the global firm when juggling performance, resources, costs

and operational logistics from relocated departments and manufacturing facilities (Manyenze, 2013). Procurement functions provide integration to globalizing companies, however, they do not provide quick fix to all market penetration and other business infrastructure (Gunson, 2010).

Procurement is an ever-growing means of conducting business in many organizations around the world. In their discussion of competitive purchasing strategies required for the twenty-first century, Monczka and Morgan (2000) affirms that firms must maximize the use of procurement functions based decisions including e-procurement in every aspect of the business, linking across all the members of the supply chain, increasing the speed of information transfer, and reducing non-value adding tasks.

According to Singhal, (2011) disruptions in procurement functions at a global level devastate corporate performance. Poorly coordinated procurement functions do long-lasting damage to companies' stock prices and profitability and need to be more thoroughly addressed by supply chain continuity planners (Christopher *et al.*, 2008). Internationalization of business leads to increased vulnerabilities in the organizational performance though, sometimes the unpredictable result of disasters like earthquakes, economic crunch or terrorist acts, often could be prevented by better risk management. Many companies in the private sector in Kenya, and Africa as a whole, have taken gigantic steps to dedicate themselves toward the achievement of the goals outlined by the United Nations (UN, 2011). In order to achieve these objectives, organizations have aspired to establish competent structures that ensure efficiency and effectiveness in their service delivery mechanisms (Jordan, 2013).

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The growth of private sector organizations has been phenomenal in Kenya mainly because of the ability to contribute to the GDP by a big margin Otieno, Ondiek, and Odera, (2012). Private organizations in Africa, particularly in Kenya, have been able to reach groups that the government and other agencies cannot in terms of income generation and poverty eradication thus giving them the legitimacy to act on behalf of the poor (Muganda, 2012). Having considering all these leads the researcher to conduct a study of investigating factors affecting performance of procurement function in Kenya Aviation Industry. Procurement functions such as contract management and resource allocation have posed a major challenge in the performance of the private sector organizations in Kenya causing a decline in their eventual contribution to the National GDP (Wanyonyi, & Muturi, 2015).

2. Overview of Aviation Industry in Kenya

The aviation industry is one of the fastest growing sectors of the Kenyan economy. Many airlines have made Nairobi their Africa headquarters where they base their operations to connect to European airports and pick-up passengers brought in by local and regional operators. In Kenya, the aviation industry is recording dramatic growth, thanks to expanding regional and global trade. More and more Kenyans can afford air travel today, unlike the past when air transport was associated with expatriates and tourists. Meanwhile, the city of Nairobi is becoming an African hub for air travel with connections to the rest of the world. The aviation industry in Kenya is majorly composed of private owned commercial airlines. The commercial airlines ferry passengers and include Kenya Airways which is the national carrier and third largest airline in Africa others being, Skyward express Ltd, Fly 540, ALS- Aircraft Leasing Services, 748 Air Services, African express, Air Kenya, Delta Connection, Safari link Aviation, Astral Aviation.

Kenya Civil Aviation Authority (KCAA) is a state corporation under the Ministry of transport that is responsible for regulating the aviation industry in Kenya and for providing air navigation services in Kenya. KCAA is the registered regulator for the aviation industry in Kenya. Aviation Industry in Kenya is dominated by Kenya Airways with tight competition from the low cost carriers for the local and east African destination. Aviation Industry in Kenya is expanding with passenger traffic numbers increasing over the years. At the main Airport Jomo Kenyatta International airport 5million passengers were served in the period before 2009 and the figure increased to around 6.5 million (WB, 2012).

3. Statement the Problem

According to the study conducted by Markus *et al*, (2013), Procurement functions touch many core aspects of a company's operations and, hence, their successful deployment and use are critical to performance and survival. Procurement functions are fragile and predisposed to regular discontinuities the study talk of how fragile the procurements is and does not touch on the factors that makes the study Fragile. According to Wanyonyi, and Muturi, (2015), the aviation industry procurement plays a major role

in attaining higher-level efficiency through optimized procurement strategies. Procurement performance is the backbone of an organization success since it contributes to competitive purchase and acquisition of quality goods that puts the organization products or services in the competitive edge in the market. However, on many occasions, that has not been the case in the aviation industry. Poor procurement performance has caused the aviation industry in Kenya a huge financial loss in terms of repairs, sourcing of materials especially outside the Kenya local market, (Otieno *et al*, 2012). The situation in the Aviation industry from the previous studies in Kenya indicates a worse condition as local operators are making losses in acquiring goods especially aircraft spare parts thus necessitating a study to examine factors influencing procurement performance in the Kenya Aviation industry with the view to improve procurement performance hence the aviation industry will be able to identify these factors, how to manage them and how to improve them for betterment of Aviation industry, (Wanyonyi, & Muturi, 2015).

General objective of the Study

To establish the effect of E-procurement on the performance of procurement functions at Skyward Express limited.

Specific objectives of the Study

- 1) To establish the effect of Web-based Enterprise Resource Planning on the performance of procurement functions at Skyward Express limited.
- 2) To establish the effect of Electronic Maintenance, Repair and Operations on the performance of procurement functions at Skyward Express limited.
- 3) To establish the effect of E-sourcing on the performance of procurement functions at Skyward Express limited.

4. Theoretical Framework

Transaction Cost Theory

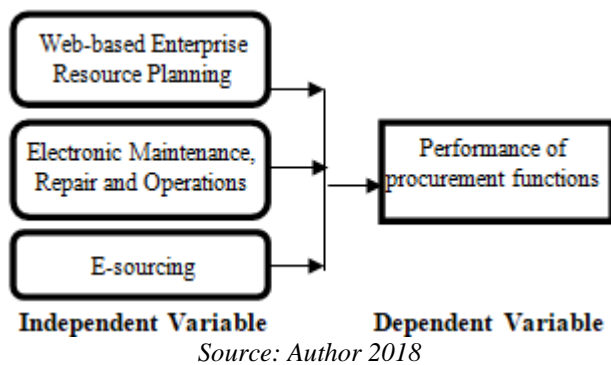
According to Njiraini *et al* (2006) transaction cost theory can be useful in unraveling sources of barriers to firms intending to participate in public procurement. Such costs include among other things the cost incurred in obtaining and verifying information about the quantity and quality of goods and services and the quality of property rights to be transferred including legal and contractual framework. Njiraini *et al* (2006) says that transaction costs relating to public procurement are those costs that enterprises incur in trying to access a contracts. In most cases, communication costs are higher for MSE than large organizations that hinder effective, fair and open competition among suppliers. Mumo *et al* (2013) observes that ten years after the e-government directorate was set to manage ICT in the government, Kenyans are still struggling with the manual access of government services making it difficult for the private sector to engage profitably with the government. This facet has led to exploitation of the procuring entities resulting in poor service delivery to the public besides perpetuating other malpractices such as corruption.

Grover and Malhotra (2003) in their well-cited study conducted an extensive investigation on the application of transaction cost theory in supply chain management. In their

empirical study of 1000 purchasing managers, Grover and Malhotra (2003) conclude that transaction cost theory applies to organizational supply chain management in four facets: effort, monitor, problem, and advantage. Effort to “build and maintain the relationship” with suppliers; cost of “monitoring the performance of suppliers”; resolving the problems that arises in the business relationships; and engagement of suppliers in “an opportunistic behavior”. However, transaction cost theory is primarily concerned with the direct economic factors in organizations and hence fails to address some important aspects of the operation of organizational supply chain, including personal and human relations among other actors in the supply chain.

5. Conceptual Framework

The study adopted the following conceptual framework:



E-procurement

According to Baily (2008) e-procurement fall under seven categories: the first is Web-based ERP (Enterprise Resource Planning). ERP deals with creating and approving purchasing requisitions, placing purchase orders and receiving goods and services by using a software system based on Internet technology. The second category is E-MRO (Maintenance, Repair and Operations) which deals with creating and approving purchasing requisitions, placing purchase orders and receiving non-product related MRO supplies. The third type is E-sourcing. This involves Identifying new suppliers for a specific category of purchasing requirements using Internet technology. The fourth type is E-tendering which involves sending requests for information and prices to suppliers and receiving the responses of suppliers using Internet technology (Kangogo & Gakure, 2013).

E-reverse auctioning is a type of e-procurement that uses Internet technology to buy goods and services from a number of known or unknown suppliers. The sixth type is E-informing which involves gathering and distributing purchasing information both from and to internal and external parties using Internet technology. The last type of e-procurement, according to Baily (2008), is E-market sites. The researcher explain the e-market site is where buying communities can access preferred suppliers' products and services, add to shopping carts, create requisition, seek approval, receipt purchase orders and process electronic invoices with integration to suppliers' supply chains and buyers' financial systems when Aviation industry employs

these e-procurement tools then the process will be easy and faster.

According to Eadie et al (2007), An organisation which uses E-procurement has the following advantages: Price reduction in tendering: a studies carried out by Gebauer et al (1988) in the United States of America suggest that there are two most important measures for the success of procurement processes that is cost and time. When an organization uses these techniques then there will be no paperwork, postage fee and other costs associated with preparation and sending tender documents. It is also faster to send a document electronically as compared to the traditional method of sending tender documents through post office.

Maverick buying is when staff buys from suppliers than those with whom a purchasing agreement has been negotiated. Lower Administration costs: in his research, Rankin (2006) argues that e-procurement results in reduction in paperwork and this leads to lower administration costs. Reduction in procurement staff: since most of the procurement process is done electronically, the number of staff needed to facilitate the process reduces. As Eadie *et al*, (2007) noted, the reduction in staff is an important way of producing competitive advantage through reduced costs. This is further supported by Egbu *et al*, (2003) in his study which revealed that through implementation of an e-procurement system, a steel supplier was able to carry out a multi-million pound project with only 20% of the staff the company would normally have used, e-procurement gives an organization competitive advantage over its competitors. As a centralized department can oversee all procurement activities and different offices worldwide can access the same documentation when required, this gives a distinct advantage over the much slower process of having to post documentation between offices. This extends the supply chain beyond geographical boundaries to a much wider group. Suppliers can be monitored on timely delivery, quality delivery of products and services hence performing suppliers can be contacted in future. This raises other logistical considerations which may impact on scheme quality (Eadie *et al*, 2007). This implies that with eprocurement, every prospective supplier and buyer is always accessible to his/her convenience. The result is not only greater market access but also increased productivity. Another benefit of e-procurement is improvement of communication: Eadie *et al* (2007) argues that eprocurement allows sections of electronic documentation to flow through the supply chain; it improves the speed of returns and subcontractor price visibility. He further notes that since it is easier to communicate requirements in a quicker more accessible manner, it will result in a better understanding of requirements and due compliance besides allowing clients to gauge the state of the market by seeing how much interest is shown in the tender. Hawking *et al*, (2004) as quoted in Eadie *et al* (2007) considered market intelligence and the decisions made on that intelligence as two separate drivers. They however state that since reliable procurement decisions cannot be made without market intelligence and each is reliant on the other for the purpose of this study these two are considered together as “Improved Market Intelligence and Enhanced Decision making”. A reduced Operating and Inventory cost is also another benefit of e-procurement: This is from the fact that much if not all paperwork is eliminated.

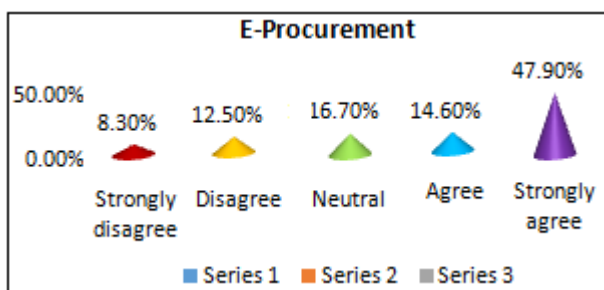
Postage costs are also not incurred, among other expenses associated with sending and receiving documents when sending them by post.

6. Research Methodology

The study design provides the layout in which the research study was carried out. The focus was to establish the effect of E-procurement on the performance of procurement functions at Skyward Express limited. A case design was embraced in this study and questionnaires were used to collect data. It was largely rely on a qualitative approach by seeking to capture detailed information about the effect of E-procurement on the performance of procurement functions. The research approach was through a case study approach where Skyward Express limited was used as a case. This method was preferred because it allows for an in depth study of the case. The research used questionnaire to gather information (Mugenda & Mugenda, 1999). The target population was drawn from employees in the given departments that are associated with the procurement functions in the company where 51 employees were chosen, according to the figures obtained from the company’s HR manual and retrieved in the company website. This study adopted census where all departmental heads were chosen and since departments have a small number of personnel directly involved in procurement process all the 51 heads were engaged in the study. The sample size therefore were all the 51 departmental heads as this number was small and manageable for the distribution of questionnaire and A descriptive study was analyzed based on secondary data obtained from available procurement records derived from the website of retrieved from the procurement registry. Qualitative analysis was done on the information collected from the results of the questionnaires; quantitative analysis was included, both descriptive and inferential statistical techniques were used. Descriptive statistics was used to analyze the quantitative data. The findings were presented using tables, graphs and pie charts.

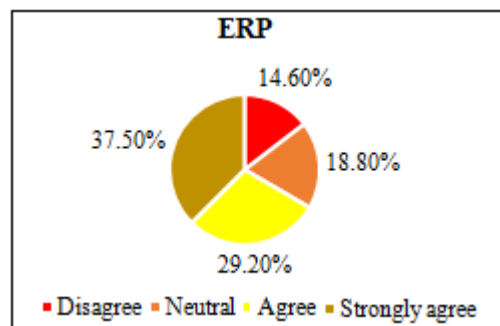
7. Results and discussions of the findings

The statements were made supporting the level of agreement with the statements that are relating to the effect of E-procurement adoption on the performance of the procurement functions as discussed here below;



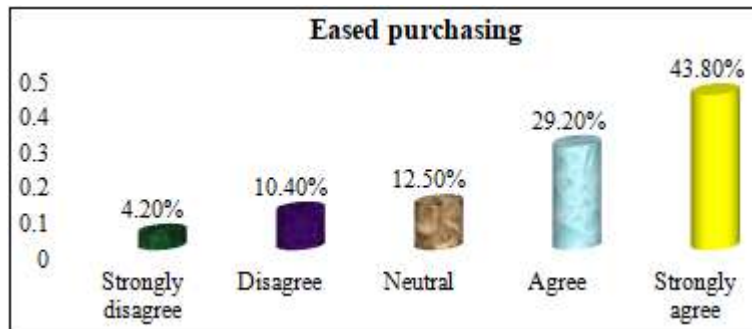
E-procurement adoption

The study sought to find out if E-procurement transforms business processes by increasing operational efficiency, reducing costs and reshaping the way organizations function as procurement process is concern. It was established that 8.30% of the respondents strongly disagree, 12.50% disagree, 16.70% were neutral, 14.60% agree and 47.90% strongly agree as in the figure above. the result from the findings disagreed with the finding of Otieno, *et al*, (2012) that the procurement functions of most entities do not comply to set procurement functions and performance procedures, leading to irregular and subjective decisions that have had costly consequences for many entities, and the organizations they operate in at large.



ERP

The study found out that 14.60% of the respondents disagree, 37.50% strongly agree, 29.20% agree and 18.80% are neutral on the statement that Enterprise Resource Planning (ERP) creating and approving purchasing requisitions, placing purchase orders and receiving goods and services hence the organization save a lot of money on procuring goods. This is summarized in the figure above. The study agrees with the findings of Eadie *et al*. (2007), on “E-procurement as a quick well-organized method of finding and linking new sources, being a lean channel for communication”. A lot of time is spend on paper invoicing in terms of writing, filing and postal communication but while in e-procurement, staff have sufficient time to engage on strategic issues of procurement The time wasted in moving from one town or country to another to look for a potential supplier or buyer is greatly reduced since with a click of a button, you can readily get the information in the internet and this justified the use of ERP in the organization.



Eased Purchasing

The study sought to find out if E-procurement has lead the organization to purchase the product at ease since ordering of the product is cheap and faster. It was established that 4.20% of the respondents strongly disagreed, 10.40% disagreed, 12.50% were neutral, 29.20% agree and 43.80% strongly agreed that E-procurement has lead the organization to purchase the product at ease since ordering of the product is cheap and faster. The study was supported by different scholars and asserts thatthrough e-procurement, every prospective supplier and buyer is always accessible to his/her convenience. The result is not only greater market access but also increased productivity. Another benefit of e-procurement is improvement of communication: Eadie *et al* (2007) argues that e-procurement allows sections of electronic documentation to flow through the supply chain; it improves the speed of returns and subcontractor price visibility and further noted that since it is easier to communicate requirements in a quicker more accessible manner, and suggest that it will result in a better understanding of requirements and due compliance besides allowing clients to gauge the state of the market by seeing how much interest is shown in the tender.

8. Conclusions

E-procurement function is a very important aspect of all functions in any organization and this is normally realized especially when the organization is projecting to introduce a purchase a new product for the organization. Whenever an organization wants to improve, the organization has to plan and provide necessary resources beforehand for the E-procurement function to be a success. Factors affecting the smooth performance of this functions should be checked and enacted appropriately and this should be done as early as possible and this should be an all-inclusive affair of all the stakeholders.

9. Recommendations

E-procurement transforms business processes by increasing operational efficiency, reducing costs and reshaping the way organizations function as procurement process is concern, organization should encourage as possible ways of promoting procurement personnel to put more effort on research and development since this will improve the innovation hence more ways of handling e-procurement will be achieved.

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