



EFFECTS OF E-SUPPLY CHAIN PROCESSES ON ORGANIZATIONAL PERFORMANCE OF NON –GOVERNMENTAL ORGANIZATIONS IN KERICHO COUNTY

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ABSTRACT

This study investigated the effects of e-supply chain processes on performance of non-governmental organizations in Kericho county Kenya. A case study of Walter reed project in Kericho. The specific objectives were: To examine how e- purchasing process, e-inventory management, e-business relationship management and e-logistics affects organizational performance of non-governmental organizations in Kericho County. The study targeted staff at Walter Reed Project Kericho. A descriptive research design was used. A stratified sampling method was used to pick a sample of 78 respondents from the target population. Data was analyzed using excel worksheets and statistical package for social science to come up with descriptive statistics. The findings indicated that e-purchasing process enhances efficiency through reduction of procurement costs and lead times through prompt fulfillment of orders and receipts thus to a large extent affects performance of non-governmental organizations in Kericho County. It also found out that e-inventory management greatly affected organizational performance through the use of Enterprise Resource Planning (Erp) systems that enabled the organization to have and maintain adequate and efficient inventory management plans. These plans thus enhanced inventory efficiency i.e. reduced costs e.g. holding costs, ordering costs, storage costs through just in time and materials requirements planning steps. The study also found out that through e-logistics processes, overall organizations performance improved. This is as a result of logistical integration. This resulted in reduced overall logistical costs thus accruing to benefits that enhanced overall organizations performance. Therefore the overall findings of the study points out clearly that the general organizational efficiency had greatly improved as a result of e-supply chain processes in non-governmental organizations in Kericho County. The study recommended that management in non-governmental organizations in Kericho County should adopt strategic utilization of information in order to achieve coordination, join forces, share design information as this would lead to effective communications with organizations suppliers as this still remained on a low score card.

Key Words: E- Purchasing Process, E-Inventory Management, E-Business E-Logistics, organization Performance

Introduction

According to Ellison and Woody, (2010), a supply chain is defined as the set of suppliers that contribute to the content of a product or system (both hardware and software) or that have the opportunity to modify its content. For decades, many organizations have struggled to be more and more competitive in their lines of business. For many organizations to achieve this, they have to innovate and apply various strategies that would help them remain at the top or be more competitive in efficient and effective ways. Since every business enterprise involve product and information sharing, the advent of information communication tools have greatly enabled this systematic resource flow thus creating a supply chain flow. Information in supply chain management is very critical; in that the needed information, the accuracy and the timely dissemination of that information is paramount as it determines the ultimate supply chain performance. This is because the interlinking nodes in a supply chain system have to be coordinated well by use of the various supply chain systems for the desired efficiency and effectiveness to be achieved.

In a usual supply chain system, supplies are procured and items are produced at one or more factories, shipped to warehouses for transitional storage space and then forwarded to retailers or end users. Supply chains involve the companies and the business activities needed to plan, create, transport, and use a good or service. Businesses expect their supply chains to provide them with the necessary information so as to carry on and succeed. Accuracy in inventory management is important in supply chain management in that, working with real time accurate inventory figures helps in effective planning be it in production or manufacturing. Although many companies have automated their inventory management using ICT

tools such as bar code readers, inventory levels in information systems and the real physical inventory levels often do not match. The difference between these inventory levels is referred to inaccuracy and can deeply affect the performance of the firms.

The supply chain process has traditionally involved slow manual procedures and even slower systematic processes for handling procurement transactions Hawking (2004). Electronic supply chain has had an increasingly important role in Business to Business (B2B) procurement where one business entity places or share procurement needs with another where there is an automatic order placement and subsequent supplies or refill by the click of a button. Web enabled Business to business (B2B) supply chain activities enhances organizational resulting in transactions cost saving and competitive sourcing opportunities for the buyer organization (Subramanian & Shaw, 2002). The information communication technology sector has really responded to the ongoing change in the business needs. It has helped many businesses in improving their operational efficiencies by providing electronic solutions and internet based solutions for their supply chain networks. From the late 1990s a number of new electronic commerce technologies emerged which promised to change working practices, threatening existing business models (Chan & Lu, 2004). Following this growth in use of electronic commerce in business to business market, there has been significant adoption of new supply chain related technology and applications by organizations globally. According to Subramani, (2004), the electronic business paradigm has created an immense opportunity for firms to consolidate their buying processes. Currently, worldwide supply chain activities are being majorly carried out on web based portals or exchanges managed by professional companies. For example, information exchange between suppliers and buyers. In some cases, manufacturing and service

businesses have established their own online portals or web pages or websites for the purpose of carrying out their procurement activities without the need to involve third party commission agents, trading companies or retailers (Taylor & Todd, 2005).

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Objectives of the study

The general objective of this study was to examine the effects of e-supply chain processes on performance of non-governmental organizations in Kericho County. The specific objectives were:

- To establish the effects of e-purchasing processes on organizational performance of non-governmental organizations in Kericho County.
- To identify the effects of e-inventory management on organizational performance of non-governmental organizations in Kericho County.
- To establish the effects of e-business relationship management on organizational performance of non-governmental organizations in Kericho County.
- To determine the effects of e-logistics processes on organizational performance of non-governmental organizations in Kericho County.

Literature Review

The performance of a firm depends not only on how efficiently it cooperates with its direct partners, but also on how well these partners cooperate with their own business partners. NT can be used to provide a basis for the conceptual analysis of reciprocity inoperative relationships. Here, the

firm's continuous interaction with other players becomes an important factor in the development of new resources (Ford, 2002). Relationships combine the resources of two organizations to achieve more advantages than through individual efforts. Such a combination can be viewed as a quasi-organization. The value of a resource is based on its combination with other resources, which is why inter organizational ties may become more important than possessing resources parse. Thus, the resource structure determines the structure of the supply chain and becomes its motivating force (Haakansson, 2002).

According to Bakker, (2008).The use of information communication technology (ICT) has facilitated the reduction of coordination costs, which has been extensively documented in the literature. For example, electronic market places, facilitated through IT, reduce the cost of searching and obtaining information about product offerings and prices. Also, collaboration facilitated through information sharing can lower transaction costs (in particular coordination costs) as companies can thereby reduce supply chain uncertainty and thus the cost of contracting. This can be explained with an example: If a supplier is unable to accurately predict the price of its product Inputs, it will be reluctant to enter into a contract, which locks it into a fixed price for an extended period of time (Smith, 2002).Uncertainty in the context of supply chains and more specifically in manufacturing is caused by Supply uncertainty, demand unpredictability, new product development unmatched and technological shifts. Supply uncertainty relates to unpredictable events that occur in the upstream part of the supply chain.

Among the causes of supply uncertainty are shortages of materials and unpredictable lead times. Clearly, supply uncertainty can disrupt manufacturing and have an adverse effect on sales, where distributors and retailers down the chain are

also affected. Demand uncertainty can be defined as unpredictable events that occur in the downstream part of the supply chain. Demand uncertainty (or demand risk) can result from seasonality, volatility of product loyalty, new product adoptions, or short product life cycles (Johnston, 2005). Furthermore, (Choi & Krause, 2005) identify three sources for the uncertainties of demand arising. This includes new product development, product price fluctuation and availability of close substitutes. Approaching the concept of uncertainty from the transaction cost economics (TCE) point of view might provide further insight into the value of information sharing between organizations. The concept of uncertainty is central to TCE, which assumes that individuals have bounded rationality and act opportunistically. The early transaction cost literature did not make a distinction between different forms of uncertainty.

More recent literature has disaggregated the construct of uncertainty. This is because, it wanted to distinguish and put into perspective each type of uncertainty and their co relational effects on the transaction cost economies. Khalifa & Shen, (2008), distinguished between primary and behavioral (or secondary) uncertainty. Primary uncertainty refers to the underlying transaction and arises from mainly exogenous sources such as uncertainty relating to forces of nature, consumer preferences, regulations, and technology (Sulek, 2006). Primary uncertainty may lead to problems of communication, technological difficulties and coordination problems that can be as a consequence adversely impact the execution of transactions.

Behavioral uncertainty refers to the risk of opportunism on transactions that are executed through incomplete contracts. Similarly Sulek, (2006) classified uncertainty as primary, competitive, and supplier uncertainty. Primary

uncertainty is consistent with and refers to the "lack of knowledge of states of nature" (Sulek, 2006). Competitive uncertainty arises from the innocent or strategic actions of potential or actual competitors. Supplier uncertainty is essentially behavioral uncertainty and refers to possible opportunism by upstream or downstream partners. In organizational theory uncertainty is often referred to as environmental uncertainty (Trent, 2007) and includes a number of factors such as uncertainty regarding suppliers and competitors actions, as well as uncertainty in regulations and technology, which captures both primary and behavioral uncertainty. Based on the reviewed literature, the definitions of the various types of uncertainty are not consistent. Some definitions overlap, whereas others ignore certain factors.

The presence of demand uncertainty and the lack of information sharing in the supply chain can lead to a problem known as the bullwhip effect: the amplification of demand variability as orders move up the supply chain (Featherman & Pavlov, 2003). Johnson & Whang, (2002), provided evidence for this finding from the food industry whereas Nagle, (2006) report on the bull whip effect in the automotive sector. There are four sources of the bullwhip effect: The bullwhip effect can be alleviated through sharing demand information in the supply chain, which reduces information asymmetry and uncertainty (Lee, 2003). Thus, limiting uncertainty through information sharing can in turn reduce companies' internal risk as companies' can optimize inventory, production, and capacity planning. Although, information sharing seems to bring with it many benefits, it can simultaneously increase transaction risk, as higher levels of business transparency can lead to opportunistic behavior. Nevertheless, uncertainty as a factor might affect companies' incentives to share information. This also agrees with

contingency theory, which states that the amount of uncertainty and rate of change in an environment affects the development of internal features in organizations (Larsson, 2008). Therefore this theory links the use of information communication in purchasing process on organizational performance.

The quest for Information Technology has long been a central tenet of the field of procurement and supply chain management (Pressutti, 2003). Within this field, Resource Based Theory (RBT) has emerged as a promising new framework for analyzing the sources and sustainability of Information Technology (Baily, 2008). According to RBT, Information Technology measured as economic rent Caridi, (2004) derives from strategic resources. Such Information Technology is sustainable to the extent that the resources on which it is based are valuable, rare, mutable, and non-substitutable (Bales & Fearon, 2006). Further, RBT rests on the premises that resources controlled by firms are heterogeneous and relatively immobile (Pearcy & Guinipero, (2008). The imperfect mobility of resources (including inimitability and non-substitutability) is due to a variety of isolation mechanisms which include co specialization of assets. Teo & Benbasat, (2003) unique historical conditions Berger & Calabrese, (2005), causal ambiguity Liao, (2007), social complexity Barnes, and tacit knowledge and skills (Puschmann & Alt, 2005). Given that organizational learning and resource-based theory both seek the objective of creating and sustaining competitive advantage as far as information technology is concerned, it seems logical for organizational learning and information flow to be identified as a strategic resource within the resource-based view. This is an equilibrium definition of sustained Information.

Compared to Transaction Cost Analysis, the RBV applies a stringent perception to the firm's

boundaries. Resources and capabilities can only be acquired from the market to a limited degree. Under certain circumstances, firms in the supply chain interact closely on a long-term basis exchanging confidential information. Hence, TPL is both a means of improving the logistics services of the buyer and a way to achieve a mutual transfer of logistics experience. A long-term mutual commitment and adjustments as well as a customized rather than standardized solution contribute to the uniqueness and heterogeneity of logistics resources and capabilities. Besides the static dimensions of heterogeneity (inimitable attributes of resources and capabilities), RBV can help us to understand as to how to use TPL to shortcut an upcoming need for competent configuration in building and development (Halldorsson & Skjoett-Larsen, 2004). The focal point of discussion is the ability of TPL to create venues through learning, either jointly or from each another, which may support the building of a core competence.

Methodology

A descriptive research design was used in this study. Descriptive survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals Orodho, (2003). The choice of this design was appropriate for this study since it utilized a questionnaire as a tool of data collection and helped to establish the perception of employees towards how information communication technology in supply chain control activities influences organizational performance in Kenya. In this study, the target population was obtained from, 158 staff of Walter reed project Kericho

A sample of 78 respondents from within each group in proportions that each group bear to the population as whole was taken by use of Slovincs formula. The study utilized primary and secondary

data which were collected using questionnaires administered by the researcher. The questionnaires comprised of questions which were meant to answer questions related to the objectives of this study. Secondary data were obtained from published documents or materials such as books, internet, journals and newspapers as is in the literature review for in depth analysis and comparison of research knowledge

Once the questionnaires were received, they were coded and edited for completeness and consistency. Both quantitative and qualitative techniques were used. The data to be obtained from the research instruments were analyzed by use of descriptive statistics (frequencies and percentages) as well as inferential statistics (Kothari, 2008). Quantitative analysis method was applied to analyze quantitative data where data were scored by calculating the percentage means. The statistical package for social sciences (SPSS) computer software was used specifically for the purpose of analyzing the quantitative data and presenting it in form of tables, pie charts and bar charts. Qualitative data analysis method was used to analyze open ended questionnaires. The data was then presented using frequency distribution tables, bar charts and pie charts for easier understanding.

Descriptive statistics is used to describe the basic features of the data in a study (Faith, 2010). Measures of spread were used as ways of summarizing a group of data by describing how spread out the scores were. To describe this spread, a number of statistics were available that includes; the range, quartiles, absolute deviation, variance and standard deviation.

Results

All questionnaires returned by the respondents were used for data analysis. The duly completed questionnaires were edited and coded.

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Cronbachs alpha for each value was established by the SPSS application version 21 and gauged against each other at a cut off value of 0.7 which was acceptable.

Out of the 78 respondents, 61 questionnaires were returned fully filled appropriately thus considered appropriate for analysis giving a percentage of 78.2%. This return rate is acceptable. Corroborating the work of Mugenda and Mugenda, (2003) who stated that a percentage response rate of 50% is adequate for analysis and reporting.

The study also determined the gender of the respondents. 58% were male and 42% female. The findings indicated that majority of the respondents were male as indicated by 58%. This response indicated that male respondents were more articulate on the effects of e-supply chain process or automation of supply chain processes more than the female respondents taken to mean that they are either tech savvy or were involved more on automated supply chain process thus being in a position to comment on the overall supply chain performance of Walter Reed Project. This response indicated that there was a near equal distribution of gender. In addition, it showed that both genders were well involved in this study and thus the findings of the study did not suffer from gender bias.

The study determined the age distribution of the respondents. 36-45 at 44% while few of them were aged above 18-25 years representing 8 percent of the respondents. This meant that a large number of those interviewed were old enough to give accurate information. This then formed the tangible basis on

the effects of e supply chain processes as a result of accurate and reliable pieces of information as they were regarded as tech savvy thus understanding the concept well. In addition it implied that majority of the respondents were less than 45 years old hence comprising of the youth. Meaning that this majority category comprising the youth clearly understand the detailed effects an automated system can have on a process in this case supply chain processes in non-governmental organizations in Kericho County.

Education was paramount to enable the respondents to conceptualize issues related to integration of supply chain processes or automation of supply chain processes. From the study it was established that majority of the respondents had attained post-secondary certificate at 95.1% college diploma at 24.59% higher diploma at 18.03% bachelor's degree at 31.14 % and post graduate degree at 11% this meant that they were able to articulate and comprehend the issues discussed on the effects of e supply chain processes on performance of Walter Reed Project.

The study determined the number of the respondents had worked at Walter reed project Kericho. From the findings, majority of the respondents had worked at the institution for 5-10 years representing 36 % and only 6 % had worked at the institution for between 20-25 years. This meant that they were in a position analyze and respond to performance issues at Walter Reed project because they had used and experienced the impact of E supply chain processes on organizational performance at Walter Reed Project queried in the study.

The study determined the distribution of respondents on organizational cadre. From the findings majority of the respondents were at the middle level of the organizations structure i.e.

middle level managers, supervisors, head of departments and senior staff members thus being in a position to give reasonable responses to the queries raised over a period of 5 years and above. This was because they worked at a tactical level where most strategic plans were implemented. This then gave firsthand information on how exactly adoption of ICT tools in supply chain processes had affected the performance of organizational performance at Walter reed project to large extent non-governmental organizations in Kericho County.

To realize the objectives of the study and answer the research questions, responses from respondents were organized and analyzed. Responses measured on Likert scale were analyzed using mean scores (M) and standard deviation (SD).The higher scores for the means indicate higher levels of each dimension. A mean score greater than 4 ($M > 4$) is considered to imply to no extent at all. A mean score greater than 3.5 but less than implies to a small extent with those with mean scores greater than 3.0 but than 3.5 imply to some extent. A mean score less than 2 is considered to imply to a very large extent.

A standard deviation greater than 1.5 implied that there was a significant variance in the way the factor was considered. This was interpreted to mean that was lack of agreement/consensus on the responses while a standard deviation less than 1.5 would imply there was consensus as answers did not differ substantially from one respondent to another.

E- Purchasing Process

The study sought to determine the rating of the respondents on the level of extent on the aspects of e-purchasing process on organizational performance of Walter reed project Kericho. The results are shown below.

Table 1 Aspects of e- purchasing process on organizational performance of non-governmental organizations in Kericho County.

Factors	Mean	Standard Deviation
E-ordering	4.35	0.554
E-Delivery management	3.89	0.842
E-contract management	3.70	0.961

According to the findings, respondents agreed to a large extent that e-ordering process affects organizational performance as shown by a mean of 4.35 and standard deviation of 0.554; that the respondents agree to a large extent that e-contract management affects organizational performance at a mean of 3.70 and standard deviation of 0.96. The respondents also to a large extent agreed that e-delivery management affected organizational performance at a mean of 3.89 and standard deviation of 0.84 .

These findings could be interpreted to mean that, automation of purchasing process enhanced efficiency through reduction of lead times, hence reduction of purchasing and inventory costs through prompt receipt and fulfillment of orders at Walter reed project Kericho. Cycle time reduction was an enduring desire to maintain a valued relationship. These findings were in support of Aberdeen Group (2005) that cost becomes a significant differentiator and the powerful competitive weapon which many organizations possess.

E-Inventory Management

Table 2 Extent to which E-inventory management factors affects organizational performance at Walter Reed Project

Factors	Mean	Standard Deviation
Material Requirement planning	3.70	0.961
Production Requirement planning	4.07	0.724
Enterprise resource Planning	3.89	0.842

Table 2 depicts the results of the extent to which electronic inventory management factors affects organizational performance at Walter reed project Kericho. A scale of 1-5 was used. The scores ``strongly disagree and disagree `` were represented by a mean score equivalent to 1-2.5 on a continuous Likert scale. The scores of undecided was represented was represented by a score of 2.6-3.5 on Likert. The scores of agreed and strongly

agreed were represented by a mean score equivalent to 3.6-5 on Likert scale. The results were presented in mean and standard deviation.

The results found out that respondents agreed to a large extent that improved ERP affected organizational performance as shown by mean of 3.8 and standard deviation of 0.84; that the respondents agreed to a large extent that improved production planning affects organizational

performance of non-governmental organization at mean of 4.07 and standard deviation of 0.7 ; the respondents agreed to a large extent that improved material management affects organizational performance at mean of 3.7 and standard deviation of 0.96.

E-business relationship Management

Table 3 Extent on the effects of E-business Relationship Management aspects on organizational Performance of Walter Reed Project Kericho.

Factors	Mean	Standard deviation
Supplier relationship	4.35	0.554
Customer relationship	4.07	0.724
Business 2 business relationship	3.70	0.961

Table 3 indicated the agreement to various business Relationship factors affecting organizational performance of Walter Reed Project Kericho. The study found out that the respondents agreed to a very large extent that supplier relationships affected organizational performance of Walter reed project Kericho as shown by a mean of 4.35 and standard deviation of 0.554. That respondents agreed to a very large extent that customer relationship affected the organizational performance of the organization as shown by a mean of 4.07 and standard deviation of 0.7; That respondents agreed to a very large extent business to business relationships affected organizational performance at Walter reed project as shown by a mean of 3.7 and standard deviation of 0.9. This study therefore corroborated the work of Shaw & Subramanian (2012), the value of e-supply chain management can be defined as price benefits. This results from saving in search, negotiation, contracting and coordination costs. With technology lock in cost in choosing and using a specific procurement system including switching

These findings corroborated the work of Bidgol, (2004) that web-based enterprise resource planning systems integrate internal and external management of information across an entire organization embracing finance/accounting/manufacturing/inventory and customer relationship management.

costs. Global sourcing is now an automatic expectation to respond to competition.

E –Logistics

Respondents were asked to indicate the extent to which they agree with the statement on the effects of e-logistics on organizational performance of Walter Reed Project. The results showed that there was efficiency in transportation functions at a mean of 3.7 and standard deviation of 0.9. Automation of transportation functions also to a large extent proved that it enhances organizational performance. The respondents also agreed to a large extent that e- information sharing/relay do affect performance of the organizations at a mean of 3.7 and standard deviation of 0.9. This finding corroborates the work of Davis & Mentzer, (2006) that logistics integration refers to functional aspects such as timeliness and technical aspects such as order accuracy leads to improved logistics management leading to improved overall performance.

Table 4 Extent to which E-logistics affects organizational performance of Walter Reed Project Kericho.

Factors	Mean	Standard deviation
Transportation	3.70	0.961
Distribution	4.07	0.724
Information Flow	3.70	0.961

The respondents were requested to rate the trend of the factors of organizational performance of Walter reed in the last 5 years. The results are shown below

Table 5 Factors of Organizational performance

What has been the trend on organizational performance of Walter reed project in the last 5 years?

Aspects of performance	Mean	Standard deviation
There has been increased organizational efficiency	4.35	0.554
Effective achievement of organizational goals	5.66	0.336
Customer satisfaction levels has improved	4.07	0.724
Timely delivery of goods and services	3.71	0.97
Inventory optimization	4.11	0.799
Improved buyer supplier relationship	3.89	0.842
Cost minimization	3.70	0.961

From the findings, the respondents rated all the statements at great extent except cost minimization and improved customer satisfaction shown by the mean 4.07. This could be interpreted to mean that organizational performance was affected at great extent by timely delivery of goods and services, inventory optimization, buyer supplier relationship.

Summary

The study established that cost saving, buyer supplier integration, cycle time reduction and information flow were the effects of e-supply chain processes on organizational performance in non-

governmental organizations in Kericho county Kenya. The objectives of this study were;

The first objective was to determine the effects of e-purchasing processes on organizational performance of non- governmental organizations in Kericho County. The results showed that there was timely delivery of orders to various work stations by use of electronic ordering processes. Automated Management of deliveries also to a great extent had affected performance of Non-governmental organizations in Kericho County by lessening the various cycle times needed to place and receive

supplies as there was Prompt response from supply chain partners.

The management of contracts also had been enhanced through the automation of various aspects of contract management. This therefore brought about a lean and efficient system of managing the contracts. All these findings revolved around general costs reduction benefits as they were in support of Aberdeen Group (2005) that cost became a significant differentiator and a powerful competitive weapon which many leading organizations possessed.

The study sought to establish the influence of the various business relationships integrations on performance on non-governmental organizations in Kericho County. From the study findings various business relationship aspects ranging from supplier relationships, Customer relationships and business to business relationships to a large extent had been enhanced by technological automation as shown by a mean of 4.3 and standard deviation of 0.5 which supported the study of Eakins, (2006) who advocated that e-procurement comes in as Competitive by enhancing process efficiency through global automated processes incorporating best practice and an enabled relationship with suppliers which improve supplier performance. From the findings improved customer relationship improved customer base which enhances real time responses to a very great extent as indicated by a mean of 3.8. The study revealed that automation of various inventory systems brought about improved material requirement planning where the needed materials are made available periodically and efficiently which in turn to a large extent influenced production requirement planning in the Organization.

This affected profitability through reduced inventory costs e.g. stock holding costs in the organization and inventory systems bringing about

improved purchasing activities. All these were rated to a large extent in the findings by a mean of 4.1 indicating an improved overall inventory management in the organization.

This objective was to determine the effects on e-logistics management on organizational performance. The results showed that there was timely delivery of materials to various field stations through efficient transportation systems with a mean of 3.7 and SD of 0.9 .The findings agreed with Gimenez & Ventura (2003,2005) who shared a common aim in analyzing the impact of internal and external integration on performance. The integration – performance models of these authors included also a relationship between the levels of internal and external integration. Again Stevens (2003) suggests that external integration is an extension of internal integration achieved in previous stage. Accordingly, companies with low internal integration strategy should present a low level of external integration and companies implementing the full internal integration strategy should have the highest levels of external integration.

Conclusion of the Study

Operating in an integrated supply chain requires continuous information flows, which in turn assist to achieve the best product flows. Walter reed project needs to establish an appropriate supply chain in order to optimize the goods flows. Most NGOS in kericho county like Walter reed project needs to embark on information sharing through technology so as to respond to customer requirement, enhance the product availability ,increase distribution and efficiently coordinate processes in order to lower the cost of inventory investment, offer better customer service and have proper guided capacity plans. Such NGOS should adopt strategic utilization of information in order to achieve coordination, join forces, share design

information and technology trends as this will lead to effective communications with organizations suppliers and stakeholders on research activities and new product development, minimized information distortion.

Most NGOs like Walter Reed Project enhances customer relationship management through supply chain integration so as to improve market value of the organization and achieve high customer satisfaction. Coordination in the organization, distribution, third party logistics providers and retailers increase organizations effectivity. The coordination in organization supply chain integration reduces risks prone operations increasing the organizations efficiency.

Recommendations of the Study

The study recommended that management of NGOs in Kericho County should enhance

information sharing in order to respond promptly to customer needs, enhance product availability and efficiently coordinate processes in order to lower the cost of inventory investment, offer better service, improve revenues and have proper guided capacity plans. The study recommended that management in non- governmental organizations in Kericho County should adopt strategic utilization of information in order to achieve coordination, join forces, share design information and technology trends as this will lead to effective communications with organization suppliers and stakeholders on research activities. The study recommended that management of NGOs like Walter reed project needs to improve the logistics processes, so as to improve the inventory visibility and velocity of inventory movement and have positive performance.

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