

**THE IMPACT E-COMMERCE ON LOGISTICS PERFORMANCE.  
A CASE STUDY; KFC (U) LTD**

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**A RESEARCH REPORT SUBMITTED TO THE COLLEGE OF ECONOMICS  
AND MANAGEMENT IN PARTIAL FULFILLMENT OF THE  
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DEGREE IN SUPPLIES AND PROCUREMENT OF  
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UNIVERSITY**

**OCTOBER, 2019**

## DECLARATION

I, ODOKORAC OSCAR do hereby declare that this research report is my own work and it has never been submitted to any University or institution for any academic award.

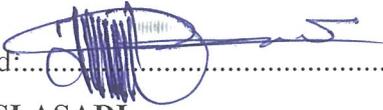
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## APPROVAL

I certify that this research report entitled “E-Commerce and Logistics Performance, the case of KFC (U) Ltd” was conducted under my guidance and supervision as the candidate’s supervisor and it is now ready to be submitted for examination with my approval.

Signed:  .....

**AYASI ASADI**

Date:  .....

## **DEDICATION**

This research study is dedicated to my beloved parents Mr. ODOCH PATRICK AMIDA and Ms AMONY SUSAN together with my beloved siblings PROSSY ATIMANGO, WINNIE STELLA, LYDIA MAVIS, FABREGAS ODONG my best friends, my beloved lecturers; Mr. MASABA, and Mr. PULE and the university management for the support towards the success of my education.

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## **ABSTRACT**

The study aimed at investigating the relationship between E-commerce and Logistics Performance of KFC (U) LTD. The objectives of the study were to investigate the forms of E-commerce used at KFC (U) LTD, to examine the level of Logistics performance at KFC (U) LTD and to identify the relationship between E-commerce and Logistics performance at KFC (U) LTD. The study adopted a descriptive research design involving both qualitative and quantitative approaches. The target population was 40 respondents who took part in the study and the respondents were purposively sampled. The researcher made use of a questionnaire as the main instrument for data collection and data was analyzed using descriptive statistics. The finding showed that KFC makes use of e-commerce tools and softwares applications in responding to the diverse needs of its customers as this indicated by mean value 4.00, indicating that KFC implying that KFC integrates E-commerce in its operations. The study therefore recommends that for successful implementation, KFC through its chain of outlets incorporates e-commerce to provide a reliable, convenient service level to its customers despite the cited challenges which hinders successful operations. The study therefore recommends that for successful operations, KFC should try and eliminate the bottlenecks within its logistics system to improve its coordination, and responsiveness to customer service requirements.

## CHAPTER ONE INTRODUCTION

### 1.0 Introduction

This chapter comprised of the Back ground of the study, Statement of the problem, Purpose of the study, Objectives, Research questions, Scope of the study, Significances of the study and the definition of key terms in relation to the topic.

### 1.1 Background of the Study

Globally E-commerce was not seen as main driver of change that would pose new strategic challenges Bookbinder, (2007). The business environment went through unprecedented change and many companies sought new ways to stand out from the competition by sustaining their competitive advantage. In today's highly competitive global marketplace, the pressure is on organizations to find new ways to create and deliver value to customers is growing stronger. E-commerce is today being applied in many organizations in a wide range and operations areas like logistics performance. It has provided new ways to store, process, distribute and exchange information both within companies and with customers and suppliers in the supply chain (Bowersox, 2008). It is now commonly accepted that E-Commerce systems provides many benefits to companies, including small and medium enterprises (SME), to make them more efficient, effective and competitive(Chatfield,2001).

Many companies conduct business using electronic commerce, whether focusing on business-to-business (B2B) or business-to-consumer (B2C) activities. They realize that easy access to information and communication and the delivery of their products or services are important drivers in developing and sustaining market competitiveness nationally and internationally. Having a supportive electronic logistics system is very important to maintain the company's competitiveness (Closs,2000). E-Logistics is an emerging area of logistics field. Alike other emerging disciplines, there is not a widely accepted definition yet. It may be that the term defines a unique subset of E-commerce and transport logistics, or that is a redundant term, which duplicates many similar terms in use. There is a rapid development in the use of E-commerce (E-commerce) in logistics performance. The application of computers, internet and information communication systems can be seen in virtually all activity in the logistics industry, such as transportation, warehousing, order processing, materials management, and procurement(Das,

2008). It can help companies to achieve competitive advantages by providing customers with superior services. The source of competitive advantage is found in the ability of the organization to differentiate in the eyes of the customer, from its competition and again from operating at lower cost and hence at lower cost and greater profit. Successful companies either have a productivity advantage that gives a lower cost profile or they have a value advantage that gives the product or offers a differential over competitive offerings (Dudley, 2006).

Gomes, (2004), asserts that many companies across the globe and organizations of all types are currently utilizing E-commerce not only for cutting costs and improving efficiency, but also for providing better customer services through effective logistics performance. The adoption of E-Commerce in logistics performance by organizations requires a business environment that encourages open competition, trust and security, interoperability, standardization and the availability of finance for E-commerce (Gorry, 2007). The effective use of E-commerce in logistics performance remains at central stage in facilitating the change and growth of enterprises (House, 2008). Logistics performance is the governance of supply chain functions. Logistics performance activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/demand planning, and management of third-party logistics services providers (Langley, 2008).

E-Commerce is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as video conferencing and distance learning. E-Commerce s are often spoken of in a particular context, such as E-Commerce s in logistics, procurement, banking, education, health care, or libraries (Lewis, 2000).

KFC (U) LTD has adopted the use of E-commerce in its logistics activities aimed at improving performance. It has put more emphasis on the application of computers, internet and information communication systems like materials resource planning, Enterprise Resource Planning, Electronic Data Interchange and Radio Frequency Identification is seen in virtually all activities in the in their logistics activities, such as transportation, warehousing, order processing, materials management, and procurement.

## **1.2 Statement of the Problem**

KFC (U) LTD is one of the companies that has adopted the use of E-commerce to improve its logistics performance, with an expectation of achieving competitive advantages over its competitors. However, there are still challenges in its logistics performance evidenced with constant delayed deliveries of products to the customers, increased stock outs, increased damages of the stored products and delivered products among others (Peters, 2008). According to the KFC (U) LTD Annual Report 2014, it was stated that the sales of the company decreased from 85% in 2013 to 72% in 2014 and this was a result of failure by logistics department to meet the customer needs in time and failure to fulfill the order. It is upon this basis that the researcher intends to investigate the impact of E-commerce on logistics Performance of KFC (U) LTD.

## **1.3 Purpose of the Study**

The purpose of the study was to assess the relationship between E-commerce and Logistics Performance of KFC (U) LTD.

## **1.4 Objectives of the Study**

The study was based on the objectives below.

- 1) To investigate the forms of E-commerce used at KFC (U) LTD.
- 2) To Examine the level of Logistics performance at KFC (U) LTD.
- 3) To identify the relationship between E-commerce and Logistics performance at KFC (U) LTD.

## **1.5 Research Questions**

The study was guided by the following research questions below.

- 1) What are the forms of E-commerce used at KFC (U) LTD.?
- 2) What is level of Logistics performance at KFC (U) LTD?
- 3) What is the relationship between E-commerce and Logistics performance at KFC (U) LTD?

## **1.6 Scope of the Study**

### **1.6.1 Subject scope**

The study focused on assessing the impact of E-commerce on Logistics performance at KFC (U) LTD. Emphasis was put on the different E-commerce systems were used in logistics activities,

the different activities involved in logistics performance and the relationship between E-commerce and logistics performance at KFC (U) LTD.

### **1.6.2 Geographical Scope**

The study was limited to KFC (U) LTD which is located at Kabalagala at shell petrol station plot 54 Ggaba road. KFC Kabalagala is about 6 Kilometers (3.7 mi) southeast of Kampala's central business district. The coordinates of the neighborhood are: 0° 17' 53.00"N, 32° 36' 2.00"E (Latitude: 0.298056; Longitude: 32.600556).

### **1.6.3 Time Scope**

The time scope of the study was limited to 2014 to 2019 because it's in these years that most of the events as per the stated in the problem statement occurred. The final research was carried out in a period of four month that is from April-July 2019.

### **1.7 Significance of the Study**

The study may be important in the following ways

- The finding of the study may provide KFC (U) LTD with role of E-commerce adoption on logistics efficiency towards smooth running on the activities.
- Logistics managers at KFC (U) LTD may be able to learn and understand how best they can use E-Commerce so as to improve on their logistics efficiency.
- The study may be of importance because it may add on the existing literature and it may be used for further research by different researchers.
- The study may help the researcher in partial fulfillment of the requirement for the award of a degree in procurement and logistics performance.

### **1.8 Definition of Key Terms**

#### **E-commerce**

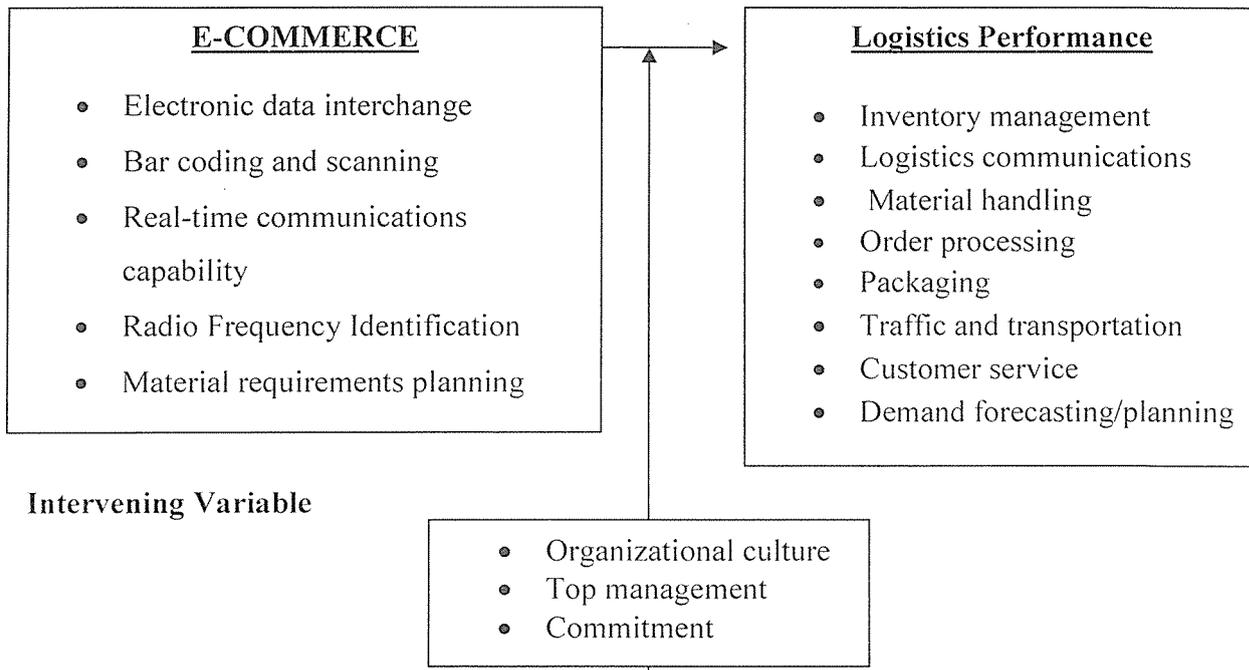
E-Commerce: Ecommerce, also known as electronic commerce or internet commerce, refers to the buying and selling of goods or services using the internet, and the transfer of money and data to execute these transactions. Ecommerce is often used to refer to the sale of physical products online, but it can also describe any kind of commercial transaction that is facilitated through the internet.

## Logistics performance

Logistics performance is the governance of supply chain functions. Logistics performance activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/demand planning, and management of third-party logistics services providers

### 1.9 Conceptual Framework

**Independent Variable**      **Dependent Variable**



Source: (Mandviwalla, 2005)

The figure above shows that the independent variable E-commerce affects the dependent variable logistics performance activities as stated above and however there are some intervening variables like commitment, top management support and others. E-commerce systems are used in different activities like inventory management, materials handling, order processing, customer services among others and in many cases it can improve on the logistics activities of the organization and also ensure that there is efficient management of the logistics function that is in case it is well managed and if it is not affected by the intervening variables.

## CHAPTER TWO LITERATURE REVIEW

### 2.0 Introduction

This section analyzed the available literature by different scholars in accordance with the research objectives.

### 2.1 Key Concepts

#### 2.1.1 Electronic Commerce

Ecommerce, also known as electronic commerce or internet commerce, refers to the buying and selling of goods or services using the internet, and the transfer of money and data to execute these transactions. Ecommerce is often used to refer to the sale of physical products online, but it can also describe any kind of commercial transaction that is facilitated through the internet (Anderson, 2004).

E-commerce is a technology solution facilitating corporate buying using the Internet. The e-procurement software refers to any internet-based software application that enables employees to purchase goods from approved electronic catalogues in accordance with company buying rules, and captures necessary purchasing data in the process (Ballou, 2001). To achieve that, the software uses protocols to automatically route and move through the necessary approval processes all employees' purchase selections of a good found on a supplier catalogue. Internet market exchanges are called the procurement systems that bring together multiple buyers and sellers in one central virtual market space and enable them to buy/sell from each other at a dynamic price (Quinn, 2004). Internet B2B is also being used and this refers to events in which multiple buyers place bids to acquire goods/services at an Internet site, for example [hospitalitysupplies.com](http://hospitalitysupplies.com). Last, Internet purchasing consortia gather the purchasing power of many buyers to negotiate more aggressively discounts, for example [yassas.com](http://yassas.com) aggregates demand of Greek hospitality operators, while [avendra.com](http://avendra.com) aggregates demand of hotel properties affiliated mainly with three major hotel chains (Atkinson, 2006).

### **2.1.2 Logistics performance**

Logistics is the management of the flow of goods between the point of origin and the point of consumption in order to meet some requirements, for example, of customers or corporations. The resources managed in logistics can include physical items, such as food, materials, animals, equipment and liquids, as well as abstract items, such as time, information, particles, and energy (Bowersox, 2008).

Logistics performance is the governance of supply chain functions. Logistics performance activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/demand planning, and management of third-party logistics services providers (Bowersox, 2008). To varying degrees, the logistics function also includes customer service, sourcing and procurement, production planning and scheduling, packaging and assembly. Logistics performance is part of all levels of planning and execution -- strategic, operational and tactical. It is an integrating function, which coordinates all logistics activities, as well as integrates logistics activities with other functions including marketing, sales manufacturing, finance, and information technology (Chatfield, 2001).

### **2.2 Forms of E-commerce systems**

They are many different E-commerce systems that organizations use in their operations and among others includes the following;

Electronic data interchange (EDI): Electronic data interchange (EDI) is an electronic communication method that provides standards for exchanging data via any electronic means. By adhering to the same standard, two different companies, even in two different countries, can electronically exchange documents (such as purchase orders, invoices, shipping notices, and many others). EDI has existed for more than 30 years, and there are many EDI standards (including X12, EDIFACT, ODETTE, among others some of which address the needs of specific industries or regions. It also refers specifically to a family of standards Anderson, D.L. (2004). Electronic Data Interchange (EDI) has successfully enhanced the communication between firms which is essential for logistics. This technology requires firms to have common data formatting and transmission standards or protocols. Such technologies have been employed by companies to coordinate their value chain activities including logistics. Early applications of EDI have been on transmitting vehicle location information by railways to their customers. Other types of logistics

information carried by EDI are purchase orders/releases and changes, advanced shipping notices, bills of lading, and invoices. The competitive advantage gained by companies employing EDI is cited in the literature. Firms utilizing EDI were better able to fulfill greater number of services to their customers (Rogers, 2002).

**Bar coding and scanning:** A barcode reader (or barcode scanner) is an electronic device for reading printed barcodes. Like a flatbed scanner, it consists of a light source, a lens and a light sensor translating optical impulses into electrical ones. Additionally, nearly all barcode readers contain decoder circuitry analyzing the barcode's image data provided by the sensor and sending the barcode's content to the scanner's output port Ballou, R.H. (2001). Bar coding is one of the most IT enablers to date and has made significant impact in the practice. Starting in 1960's some of the earliest implementation of bar codes were in rail road cars. Nowadays it is rampant in anything that needs to be identified and tracked. The different types of bar codes are available, known as symbologies, for different purposes. In practice, most firms prefer to use industry standards rather than proprietary standards for most of their bar codes on their products. By following industry standards, bar codes reduce the complications inherent in the use of multiple standards and thus provide a strong foundation for integrating the corporate logistics and the supply chain (Closs, 2000).

**Real-time communications capability:** Real-time communications capability is a system that that supports browser-to-browser applications for voice calling, video chat, and Place to Place file sharing without the need of either internal or external plugins Bowersox, D.J. (2008). The logistics IT capability of real-time communications is essential for maintaining the flow of information. One of the important roles of logistics IT is to substitute information for inventory. To make real-time tracking of goods, logistic information systems of business partners should have real-time communications capability. The business partners require an integrated messaging architecture which exchanges business data while customizing business flows and format transformation. Real-time communications also allows for schedule plans to change in dynamic routing and scheduling system when the vehicles are already out on the road. Any last minute changes in routing and scheduling system or constant tracking has been possible only with real-time communications ability of the respective systems (Closs, 2000).

Radio Frequency Identification (RFID): Radio-frequency identification (RFID) is the wireless use of electromagnetic fields to transfer data, for the purposes of automatically identifying and tracking tags attached to objects. The tags contain electronically stored information. Some tags are powered by electromagnetic induction from magnetic fields produced near the reader (Dudley, 2006). RFID helps to identify, track and locate items automatically. The use of Radio Frequency Identification (RFID) is expected to increase rapidly in coming years. Often referred to as the next step in the evolution of bar-coding, RFID is growing rapidly in the automatic data capture and identification market (Sauvage, T. 2003). RFID is not a new technology, in fact, its use dates back to 1940's but only now it is starting to make a significant impact within the supply chain. The growth in use of RFID will be enhanced to some extent by mandates from large retailers such as Wal-Mart and Target, and the US Department of Defense, who require their suppliers to adopt this technology within the next few years (Mandviwalla, 2005).

Material requirements planning (MRP): Material requirements planning (MRP) is a production planning, scheduling, and inventory control system used to manage manufacturing processes. Most MRP systems are software-based, while it is possible to conduct MRP by hand as well. MRP system is intended to simultaneously meet three objectives: Ensure materials are available for production and products are available for delivery to customers. Maintain the lowest possible material and product levels in store and Plan manufacturing activities, delivery schedules and purchasing activities (Dudley, 2006). There are three primary functions of an MRP system. First, the system helps ensure that the appropriate materials are available for production and the necessary products are available for customers to avoid shortages. Second, MRP reduces waste by maintaining only the lowest possible materials and product levels in stock. Lastly, an MRP system helps plan manufacturing functions, delivery schedules and purchasing. When an MRP system is doing its job, it reduces material waste while also avoiding product shortages. Data integrity, however, is a major issue for successful material requirements planning (Gomes, 2004).

Enterprise resource planning (ERP): Enterprise resource planning (ERP) is business management software usually a suite of integrated applications that a company can use to collect, store, manage and interpret data from many business activities, including, Product planning, cost,

Manufacturing or service delivery, Marketing and sales, Inventory management and Shipping and payment ERP provides an integrated view of core business processes, often in real-time, using common databases maintained by a database management system. ERP systems track business resources cash, raw materials, production capacity and the status of business commitments: orders, purchase orders, and payroll. The applications that make up the system share data across the various departments (manufacturing, purchasing, sales, accounting, etc.) that provide the data. ERP facilitates information flow between all business functions, and manages connections to outside stakeholders (Gomes, 2004).

### **2.3 The Level of Logistics Performance in Organizations**

Logistics performance involves many activities basing on the nature of the organization and the logistics system and among these activities include;

**Inventory management:** Inventory or stock refers to the goods and materials that a business holds for the ultimate purpose of resale (or repair). Inventory management is a science primarily about specifying the shape and percentage of stocked goods. It is required at different locations within a facility or within many locations of a supply network to precede the regular and planned course of production and stock of materials. The scope of inventory management concerns the fine lines between replenishment lead time, carrying costs of inventory, asset management, inventory forecasting, inventory valuation, inventory visibility, future inventory price forecasting, physical inventory, available physical space for inventory, quality management, replenishment, returns and defective goods, and demand forecasting. Balancing these competing requirements leads to optimal inventory levels, which is an on-going process as the business needs shift and react to the wider environment (Lewis, 2000)

**Logistics communications:** Lieb, (2002) states that communications are becoming increasingly automated, complex, and rapid. Logistics interfaces with a wide array of functions and organizations in its communication processes. Communication must occur between: The organization and its suppliers and customers, The major functions within the organization, such as logistics, engineering, accounting, marketing, and production, The various logistics activities listed previously, The various aspects of each logistics activity, such as coordinating warehousing of material, work in process, and finished goods, Various members of the supply chain, such as intermediaries and secondary customers or suppliers who may not be directly

linked to the firm and Communication is key to the efficient functioning of any system, whether it in the distribution system of an organization or the wider supply chain (Collis,2004).

**Order processing:** Order processing entails the systems that an organization has for getting orders from customers, checking on the status of orders and communicating to customers about them, and actually filling the order and making it available to the customer. Part of the order processing includes checking inventory status, customer credit, invoicing, and accounts receivable. Thus, order processing is a broad, highly automated area. Because the order processing cycle is a key area of customer interface with the organization, it can have a big impact on a customer's perception of service and, therefore, satisfaction (Novack, 2002).

**Packaging:** Packaging is valuable both as a form of advertising/marketing, and for protection and storage from a logistical perspective. Packaging can convey important information to inform the consumer. Aesthetically pleasing packaging also can attract the consumer's attention. Logistically, packaging provides protection during storage and transport. This is especially important for long distances over multiple transportation modes such as international shipping (Perry, 2008).

**Parts and service support:** In addition to supporting production through the movement of materials, work in process and finished goods, logistics also is responsible for providing after-sale service support. This may include delivery of repair parts to dealers, stocking adequate spares, picking up defective or malfunctioning products from customers, and responding quickly to demands for repairs (Peters,2008).

**Traffic and transportation:** A key logistics activity is to actually provide for the movement of materials and goods from point of origin to point of consumption, and perhaps to its ultimate point of disposal as well. Transportation involves selection of the mode (for example air, rail, water, truck, or pipeline), the routing of the shipment, assuring of compliance with regulations in the region of the country where shipment is occurring, and selection of the carrier. It is frequently the largest single cost among logistics activities (Graebner, 2007).

## **2.4 The Relationship between E-commerce and Logistics Performance**

The use of E-commerce relates to logistics performance in many ways and among these include;

**Lead to substantial cost savings:** The use of E-commerce in logistics can lead to substantial cost savings (Sauvage, 2003). Such technologies are able to improve business processes and interconnections with other trading partners operating in the supply chain. These systems allow the information exchange in real time improving the ability of planning transport and logistics activities and the level of customer service (Anderson, 2004).

**Facilitate logistics information collection and exchange:** Identification technologies that facilitate logistics information collection and exchange. Nowadays, as regards the data acquisition technologies, the firms usually deal with a large amount of goods and data which means that data collection and exchange are critical for logistics information management and control. Good quality in data acquisition can help firms deliver customers' goods more accurately and efficiently. To attain this goal firms could appeal to some data acquisition technologies in logistics field, such as the optical scanning, the electronic pen notepads, the voice recognition and the robotics (Rogers, 2002).

**Combine for logistics process integration and world class performance:** The Global Logistics Research Team (1995) determined that E-commerce is one of seven capabilities that combine for logistics process integration and world class performance. Adoption and successful implementation of E-commerce is intended as a prerequisite for logistics success (Sauvage, 2003). **Makes possible that firms monitor their inventories, improve the utilization of their transportation and warehouse assets:** The use of E-commerce makes possible that firms monitor their inventories, improve the utilization of their transportation and warehouse assets, and eliminate duplication of effort in performing different logistics activities for their user firms. Many logistics managers consider E-commerce as a major source of improved productivity and competitiveness. They are also presented as a key component in the logistics systems (Porter, 2005).

**Tracks of goods in transit:** The different E-commerce systems like the Radio Frequency Identification RFID helps to track and monitor the goods in transit from the supplier to the organisation or from the organization to the customers. This can help to reduce on the dangers that can happen in the movement of the cargo like theft and also to know where exactly the cargo has reached. This has helped in logistics performance (Schwarz, 2000).

Records management: Organizations use E-commerce systems in records management and this involves the use of computers to save the information concerning the stock on the hard disks both the internal and the external, saving of the information on the flash disks, CD's and this information can be kept for a long period of time when they are safe. Proper record management or the use of the E-commerce system in record management leads to effective inventory management because the required information will be available when it is needed to be used in the management of the stock (Anderson, 2004).

Security of inventory: E-commerce are used in security purpose like the use of CCTV camera's in store that can help to prevent theft of the stock. These cameras allow easy monitoring of the stock because if the cameras are put in the store, it will mean that all the stock will be monitored and in case there is any tamper with the stock, like stealing part of the stock, the store managers will be able to see and those who are involved in such acts and this can reduce on theft of this stock and hence proper management of the inventory (Asif, 2005).

Monitoring of stock: Organizations use the information and communication technologies in the monitoring of stock and this is where they use screens in the store that can be used to monitor the inventory. This means that the whole stock is under control this can help them to know the number of stock that is being kept, that which has been issued and that which has been received. This can help in proper stock controls in that it can help to determine the maximum stock level, minimum stock level, reorder level and the reorder quantity (Ballou, 2001).

Materials management: Organizations use E-commerce tools in materials management. Materials Management is simply the process by which an organization is supplied with the goods and services that it needs to achieve its objectives of buying, storage and movement of materials. Materials Management is related to planning, procuring, storing and providing the appropriate material of right quality, right quantity at right place in right time so as to co-ordinate and schedule the production activity in an integrative way for an industrial undertaking. The E-commerce used include the enterprise resource planning among other tools (Bardi, 2006).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter explained the different methods of research that includes the Research Design, Study Population, Area of the study, Sampling Design, Data Collection Methods and Instruments, Data Sources, Variables of the Study, Data Reliability and Validity, Procedures of Data Collection, Data Presentation and Analysis and lastly Limitation of the study.

#### **3.1 Research design**

A research design is the "blue print" of the study. The design of a study defines the study type (descriptive, correlational, semi-experimental, experimental, review, meta-analytic) and sub-type (descriptive-longitudinal case study and a cross sectional research design). A case study research design used involved both qualitative and quantitative basing on the nature of data to be collected. A case study research design is an in depth study of a particular situation rather than a sweeping statistical survey. It is a method used to narrow down a very broad field of research into one easily researchable topic. Qualitative data involved the descriptive data that based on opinions, ideas, concepts and events of the study. Quantitative data involved numerical data that was collected with necessitating figures which required more analysis to come up with the meaning.

#### **3.2 Population of the study and Area of Study**

Population study is a study of a group of individuals taken from the general population who share a common characteristic, such as age, sex, or health condition. The study targeted population of 100 employee from KFC (U) LTD and these came from different departments like Accounts department, procurement department, Administration, sales and marketing, E-commerce department and logistics department.

#### **3.3 Sampling Design**

A sample design is the framework, or road map, that serves as the basis for the selection of a survey sample and affects many other important aspects of a survey as well.

##### **3.3.1 Sample Size**

The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. In practice, the sample size used in a study is

determined based on the expense of data collection, and the need to have sufficient statistical power (Lewis, 2000).

Using the Krejcie, & Morgan, (1970) table of determining Sample size from a given Population, this Study used a sample size of 40 respondents and these respondents were got from a population of 50 as illustrated below;

**Table: 1 Constituents of the Sample**

Post /department	Population	Sample	Sampling method
Procurement	3	2	Purposive Sampling
Sales and marketing	15	10	Purposive Sampling
Accounts	2	2	Purposive Sampling
E-commerce	10	8	Purposive sampling
Logistics	20	18	Purposive sampling
<b>Total</b>	<b>50</b>	<b>40</b>	

Source: Primary data, 2019

### 3.3.2 Sampling Technique

A sampling technique is the name or other identification of the specific process by which the entities of the sample was selected (Novack, 2002). The researcher used Purposive Sampling technique and this method was used because the researcher was interested in getting information from those who had knowledge and expertise on issues to do with E-commerce and logistics performance. The respondents were chosen after inquiring if they had any knowledge concerning the study topic and also depending on the position they held in the organization and also the time they had spent in the organization as well. This helped to get accurate figures and reliable information.

### 3.4 Data Sources

This involved the origin of the data to be collected and it involved both secondary and primary sources.

### **3.4.1 Secondary Data**

Secondary data was also obtained from external sources such as the internet, Journals of change and other documentations. The purpose of sourcing for secondary data was to help in the formation of problems, literature review and construction of questionnaire.

### **3.4.2 Primary data**

Primary data is that which was collected by researchers themselves during their own research using research tools such as experiments, survey questionnaires, interviews and observation Rogers, D.S (2002). Primary data involved the use of questionnaires and interview methods.

## **3.5 Data Collection Instruments**

Data collection was simply on how information is gathered. There are various methods of data collection, such as personal interviewing, telephone, mail and the internet. Depending on the survey design, these methods can be used separately or combined Perry, (2008). Data was collected using questionnaires and interviews.

### **3.5.1 Questionnaire**

A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents Peters, (2008).

The researcher used likert scale questions and open ended questions .The likert scale questions involved a level fluctuation in the agreement down wards from strongly agree to strongly disagree, these saved the respondents time because the respondents had no time to think on what to answer since the alternatives were given and what was required was to tick on the level of agreement. The researcher also used open ended questions and these were used in case the researcher had other options apart from the ones mentioned in the table and he or she was required to specify others. This allowed the researcher to suggest hisown response to the question.

### **3.5.2 Interviewing**

An interview is a conversation between two or more people where questions are asked by the interviewer to elicit facts or statements from the interviewee Porter, M.E. (2005). A semi-structured interview was considered with the top management that was the Heads of Departments. Interviews were also used due to certain officers who did not have time to answer

the questions and those who did not know how to read and write.

### **3.6 Validity and Reliability**

#### **3.6.2 Reliability**

Reliability is the degree to which an assessment tool produces stable and consistent results (Sauvage, 2003). To ensure reliability of the data collected, the researcher carried out a pretest in form of a pilot study to ensure that the tools were fit for data collection. The data collected confirmed to the tests of validity and reliability. The researcher observed that the data obtained was valid because the tools that were used in the study was first approved by the supervisor, a pretest was carried out in form of pilot study to determine the reliability of these tools.

#### **3.6.3 Validity**

Validity refers to how well a test measures what it is purported to measure (Schwarz, 2000). The researcher ensured validity of the data collected by use of two different tools of data collection that was the questionnaires and the interview and this helped to reduce biasness and errors in that was one method fails, another was applied.

### **3.7 Procedures of Data Collection**

Data collection procedure is a systematic approach to gathering information from a variety of sources to get a complete and accurate E-Commerce of an area of interest. The researcher got an introduction letter from the Research Coordinator faculty of business and management Cavendish University to the management of KFC (U) Ltd requesting authorization and recommendation to conduct a study research at KFC (U) LTD. This letter was then taken to the organization to obtain acceptance and permission to conduct the research on the chosen respondents. Upon acceptance, the researcher administered the questionnaire to the selected respondents based on their schedule or convenience. The excise was carried out in a period of two weeks.

### **3.8 Data Analysis and Presentation**

#### **3.8.1 Data Analysis**

Data analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data Bowersox, D.J. (2008). The data will be analyzed using percentages and frequency.

### **3.8.2 Data Presentation**

Data presentation refers to the methods which the researcher used to show the results of the study. The analyzed data was presented in an essay form use tables and bar graphs.

### **3.9 Ethical Consideration**

Ethical consideration is an accumulation of values and principles that address questions of what is good or bad in human affairs Chatfield, A.T. (2001). For ethical consideration, the researcher got permission from the university by getting a letter of introductory with a stamp which she then took to the organization so as to allow him carry out research on the study topic and lastly the researcher ensured that the information got from the Organization was treated with a lot of confidentiality.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

#### 4.0 Introduction

This chapter presents data interpretations, analysis and presentation; on “The role of E-Commerce on Logistics Performance of KFC (U) LTD.

#### 4.1.1 Demographic Information

**Table 2: Gender of Respondents**

Sex	Frequency	Percent	Valid Percent	Cumulative Percent
Male	20	40.0	40.0	40.0
Female	30	60.0	60.0	101.0
<b>Total</b>	<b>50</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Primary, 2019**

From the findings, table 1 shows the majority of respondents were female with 30(60%), compared to 20(40%) male counterparts. This implies that the highest percentage is represented by female employee at KFC (U) LTD.

#### 4.1.2 Marital Status of the Respondents

**Table 3: Marital status**

	Marital status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	9	18.0	18.0	18.0
	Married	31	62.0	62.0	80.0
	Others	10	20.0	20.0	101.0
	<b>Total</b>	<b>50</b>	<b>101.0</b>	<b>100</b>	

**Source: Primary data 2019**

Analysis of findings from table 3 indicate that majority of respondents 31(62%), followed by others 20 (20%), with 9 (18%) single. This implies that the organization employed mature individuals who understand customer needs

### 4.1.3 Age Bracket of Respondents

**Table: 4 Age Bracket of Respondents**

	Age bracket	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 -29 years	10	20.0	20.0	20.0
	30 -39 years	26	52.0	52.0	72.0
	40 -49 years	5	10.0	10.0	82.0
	50-59 years	8	16.0	16.0	98.0
	Above 60 years	1	2.0	2.0	100.0
	<b>Total</b>	<b>50</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Primary Data 2019**

Findings in table 4 indicated that majority of the respondents were 26(52)% which were between the age bracket of 30 -39 years, followed by 10(20)% with the age of 20 -29 years, 5(10)% were between 40-49 years, and 1(2)% above 60 years. This implies that there were adequate representation of the study population and data provided represented the views of age groups therefore, Electronic data interchange (EDI) is an electronic communication method that provides standards for exchanging data via any electronic means. By adhering to the same standard, two different companies, even in two different countries, can electronically exchange documents (such as purchase orders, invoices, shipping notices, and many others).

### 4.1.4 Level of Education

**Table 5: Level of Education**

Level of education	Frequency	Percent	Cumulative Percent
Post graduate	13	26.0	26.0
Certificate	10	20.0	46.0
Diploma	13	26.0	72.0
Degree	5	10.0	82.0
Others	9	18.0	100.0
<b>Total</b>	<b>50</b>	<b>100.0</b>	

**Source: Primary Data, 2019**

From table 5 above, the majority of the respondents 13(26%) were Post graduate and diploma holders respectively and 5(10%) were degree holders while 9(18%) of the respondents did not specify their educational background. This implies that the respondents had at least a minimum level of education which makes the work easier for the KFC (U) LTD despite the role of E-Commerce on Logistics Performance that has been taking place in the region.

**4.1.5 Position held**

**Table 5: Position held**

<b>Position held</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Administrators	11	22.0	22.0	22.0
Accountants	28	56.0	56.0	78.0
Operational Staff	9	18.0	18.0	96.0
Casual workers	2	4.0	4.0	101.0
<b>Total</b>	<b>50</b>	<b>101.0</b>	<b>101.0</b>	

**Source: Primary Data 2019**

From the table 6 above majority of respondents were Accountants 28(56%), followed by Administrators 11(22%), operational staff 9(18%) and Casual workers 2(4%). This implies that the entity employs a big number of employees to manage its operations.

#### 4.1.6 Period served in this organization

**Table 6: Duration in KFC (U) LTD**

Duration		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less 1 year	11	22.0	22.0	22.0
	1-5yr	21	42.0	42.0	64.0
	5-10years	8	16.0	16.0	80.0
	Above 10yrs	10	20.0	20.0	101.0
	<b>Total</b>	<b>50</b>	<b>101.0</b>	<b>101.0</b>	

**Source: Primary Data, 2019**

Table 7, clearly shows that the biggest percentage of 21(42%) have worked for a period of 1 to 5 years in KFC (U) LTD, 11(22%) for Less than 1year, 10(20%) for were Above 10yrs, 8(16%) were between 5-10years. This implies that most respondents in KFC (U) LTD have worked for many years.

Results in the figure above Demonstrates the biggest percentage of 21(42%) have worked for a period of 1 to 5 years in KFC (U) LTD, 11(22%) for Less than 1year, 10(20%) for were above 10 years, and 8(16)% were between 5-10years. This implies that most respondents in KFC (U) LTD have worked for many years.

#### 4.2 Descriptive Statistics

Respondents were asked to respond to a number of statements regarding the impact of transportation management on Cost reduction. The following were the results;

##### 4.2.1 Forms of E-commerce Systems.

The study used the questionnaire that was designed and generated using a five-point scale with different levels of agreement for each statement that is, 1-Strongly Disagree, 2-disagree, 3-Undecided, 4-Agree and 5-Strongly Agree. This therefore shows that all responses averaging 3.0 and above accounted for “Agree” whereas all responses averaging below 3.0 accounted for “Disagree”. The descriptive statistics are discussed in the table 4.4 below;

**Table: 7 Showing Descriptive Statistics Forms of E-commerce systems**

	Min	Max	Mean	Std. Dev
The organization use Electronic Data Interchange (EDI) which is a computer linked upon networks	1	7	2.78	1.542
The organization use scanners which is an electronic device for reading printed barcodes	1	7	4.00	1.355
The organization use Real-time communications capability which supports browser-to-browser applications for voice calling	1	7	3.88	1.136
The organization use Radio Frequency Identification (RFID) which tracks the cargo	1	7	3.22	1.433
The organization material requirements planning manages the manufacturing process	1	7	3.10	1.764
The organization use Enterprise resource planning (ERP) which helps planning for the required stock basing on the customer orders	1	7	4.00	1.255
The organization uses Electronic mail (e-mail) that are used to share information with the different stakeholders.	1	7	3.10	1.255
<b>Valid N (listwise)</b>				

**Source. Primary data, 2019**

From table 8 above, majority of the respondents agreed that the organization use Electronic Data Interchange (EDI) which is a computer linked upon networks with a mean of 2.78 although some of the respondents had different views as shown by the standard deviation of 1.542. This was supported by Taylor, (2006) who asserts that it is about delivering goods and services to customers as fast as possible. This involves making quick decisions and rapidly moving

materials and information inside the operations. For example, in the context of trade and transport facilitation, 'automated processes' can be a speed performance factor. Electronic Data Interchange (EDI) is the computer-to-computer exchange of standard business documents such as purchase orders, invoices, and bills of lading, among organisations. Transmitting these documents electronically, or on-line, saves time and money by cutting down on paperwork and data entry (Laudon, 1995). Figure 15 illustrates an EDI system that transmits a purchase order (P.O.) from the buyer to the seller.

The organization use scanners which is an electronic device for reading printed barcodes. Table 8 above shows that majority of the respondents agreed that there is the organization use scanners which is an electronic device for reading printed barcodes with a mean of 4.00. However; some of the respondents had different views as shown by the standard deviation value of 1.355. According to Bin, (2004), A barcode reader (or barcode scanner) is an optical scanner that can read printed barcodes, decode the data contained in the barcode and send the data to a computer. Like a flatbed scanner, it consists of a light source, a lens and a light sensor translating for optical impulses into electrical signals.). Using barcode technology in stores can help to solve all these problems. It lets you keep a centralized record on a computer system that tracks products, prices, and stock levels. You can change prices as often as you like, without having to put new price tags on all your bottles and boxes. You can instantly see when stock levels of certain items are running low and reorder. Because barcode technology is so accurate, you can be reasonably confident that any items that are missing (and don't appear to have been sold) have probably been stolen and maybe move them to a more secure part of your store or protect them with RFID tags.

Table 8 above shows that majority of the respondents agreed that The organization use Real-time communications capability which supports browser-to-browser applications for voice calling with a mean of 3.88 and some respondents, however, had different views as shown by the standard deviation of 1.136, this was supported by Whinston, (2003) who consistently producing goods and services that meet expectations. The quality objective can be achieved by the provision of error-free products or services that fulfill customer requirements. This requires skilled workforce, adequate job specifications, proper technologies, and effective communication. For example, in order to add real time capabilities to commercial browsers in a

standardized manner and move from proprietary solutions, the major standardization groups responsible for the advancement of the Internet protocols and applications have launched the HTML5 and real-time WebRTC initiatives to complement web applications with real time media features.

The results of the survey as reflected in table 8 suggest that respondents agree that there is the organization use Radio Frequency Identification (RFID) which tracks the cargo. This is shown by a mean of 3.22. However, a standard deviation of 1.433 is a clear manifestation of varied responses from respondents as far as Low cost is a universally attractive aspect. RFID helps to identify, track and locate items automatically. The use of Radio Frequency Identification (RFID) is expected to increase rapidly in coming years. Often referred to as the next step in the evolution of bar-coding, RFID is growing rapidly in the automatic data capture and identification market (Sauvage, T. 2003). RFID is not a new technology, in fact, its use dates back to 1940's but only now it is starting to make a significant impact within the supply chain.

The results of the survey as reflected in table 4.4 suggest that respondents were indifferent as to whether they were normally empowering our service providers to manage as revealed by the mean value 3.10. However, a standard deviation of 1.764 reveal varied responses from the respondents about the E-Commerce practices in KFC (U) LTD and found out that performance indicators were enhanced by improvements in the E-Commerce that led to cost reduction. Maintain the lowest possible material and product levels in store and Plan manufacturing activities, delivery schedules and purchasing activities (Dudley, 2006). There are three primary functions of an MRP system. First, the system helps ensure that the appropriate materials are available for production and the necessary products are available for customers to avoid shortages.

#### **4.2.2 The Level of Logistics Performance in Organizations**

Table 4.5 below shows the descriptive statistics on The Level of Logistics Performance in Organizations. Below are the results;

**Table 8: The Level of Logistics Performance in Organizations**

	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev</b>
The inventory is controlled well in an organization.	50	1	5	2.74	1.575
There is information sharing with key players .	50	1	5	3.30	1.313
There is proper handling and management of materials	50	1	5	3.50	1.266
Orders are processed basing of the customer orders.	50	1	5	3.96	1.456
<b>Valid N (listwise)</b>	<b>50</b>				

**Source; Primary data, 2019**

As noted from table 9 findings show that the respondents agree that the inventory is controlled well in an organization with a mean value of 3.50. However, some of the respondents had different views as shown by the standard deviation of. 1.266. This was because, the special orders sell on occasion and have those products available in a limited quantity to keep your inventory costs down and to develop a positive reputation for quickly filling special orders. The scope of inventory management concerns the fine lines between replenishment lead time, carrying costs of inventory, asset management, inventory forecasting, inventory valuation, inventory visibility, future inventory price forecasting, physical inventory, available physical space for inventory, quality management, replenishment, returns and defective goods, and demand forecasting. Balancing these competing requirements leads to optimal inventory levels, which is an on-going process as the business needs shift and react to the wider environment (Lewis, 2000)

Table 9 above shows the respondents who agree that there is information sharing with key players with a mean value of 3.28. However, some of the respondents had different views as shown by the standard deviation of 1.313. This implied that in. This was supported by the study carried out by Lieb, (2002) who states that communications are becoming increasingly automated, complex, and rapid. Logistics interfaces with a wide array of functions and

organizations in its communication processes. Communication must occur between: The organization and its suppliers and customers.

There is proper handling and management of materials. This is revealed by a mean value of 3.50. However, a significant standard deviation value of 1.266 under the same test revealed varied responses from the respondents. This is also in argument, Order processing entails the systems that an organization has for getting orders from customers, checking on the status of orders and communicating to customers about them, and actually filling the order and making it available to the customer. Part of the order processing includes checking inventory status, customer credit, invoicing, and accounts receivable. Thus, order processing is a broad, highly automated area. Because the order processing cycle is a key area of customer interface with the organization, it can have a big impact on a customer's perception of service and, therefore, satisfaction (Novack, 2002).

From table 9, it has been revealed that Orders are processed basing of the customer orders. This is shown by a mean value of 3.96 although the standard deviation of 1.456 under the same test revealed varied responses from the respondents. The results of the study were that efficiency in the E-Commerce and cost reduction resulted in improved organizational performance and product innovation.

#### **4.2.3 Relationship between E-Commerce and Logistics Performance**

The respondents were asked on the solutions to address the challenges facing international organizations in ensuring food security. The results for the analysis were as indicated in table 10 below;

**Table: 9 Relationship between E-Commerce and Logistics Performance**

	Min	Max	Mean	Std. Dev
The use of E-Commerce helps in substantial cost savings in logistics activities	1	5	3.48	1.249
The E-Commerce facilitates logistics information collection and exchange.	1	5	3.56	.972
The use of EDI helps to combine logistics process integration and world class performance	1	5	3.20	1.385
E-Commerce makes possible that firms monitor their inventories.	1	5	3.76	1.492
E-commerce improves the utilization of their transportation and warehouse assets.	1	5	3.40	1.485
Valid N (listwise)				

**Source: primary data 2019**

Table 10 above, showed the majority of the respondents who agreed that The use of E-Commerce helps in substantial cost savings in logistics activities. This is revealed with a mean of 3.48. However, a standard deviation of 1.249 from the same test revealed varied responses. Thus E-Commerce can be seen as a link to cost reduction opportunities. However, the cost saving is not the only objective of E-Commerce.

Table 10 above reveals that the respondents agree that Policy change that champions sustainable and locally produced food can increase community food security. With a mean value of 3.56 however; some of the respondents had different views as shown by the standard deviation of .972.

Table 10 above reveals that the use of EDI helps to combine logistics process integration and world class performance with a mean of 3.20 and standard deviation of 1.385 showing that some respondents had different views. Firms in business-to-business markets are embedded in a

complex network of relationships with suppliers, customers as well as a number of other stakeholders.

The results of the survey as reflected in table 4.6 suggest that respondents agree that E-Commerce makes possible that firms monitor their inventories, this is shown by a mean of 3.76. However, a standard deviation of 1.492 is a clear manifestation of varied responses from respondents as far as they found a positive relationship between E-Commerce practices and Logistics Performance with the moderating effect of Logistics role.

To results of the survey as reflected in table 10 suggest that E-commerce improves the utilization of their transportation and warehouse assets as revealed by the mean value 3.40. However, a standard deviation of 1.485 reveals varied responses from the respondents found that all E-Commerce practices, except customer relationship, positively affected SC performance. Ibrahim and Ogunyemi (2012) investigated E-Commerce in terms of supplier and customer partnerships, and level and quality of information sharing.

## **CHAPTER FIVE**

### **SUMMARY OF THE FINDINGS,**

#### **5.0 Introduction**

This chapter presents the discussion of the key findings basing on objectives. The main objective of this chapter is the presentation and discussion of the findings on the impact of transportation management on Cost reduction, the impact of warehousing on customer satisfaction and the relationship between E-Commerce on Logistics Performance. Tables have been used to present the findings. This chapter investigated sample characteristics, provide descriptive statistics on the responses for each variable and the relationship between different variables.

#### **5.1 Conclusion**

The study found out that E-Commerce practices were implemented to a large extent, logistics information practices were implemented to a low extent, and cost reduction was implemented to a moderate extent while distribution management was implemented to above average extent. The study therefore concludes that there are variations among the level of implementation of the practices. Hence the extent of implementation is concluded to base largely on the desired outcomes or the managements' preferences. The study also found out that there are challenges that limit the effectiveness of the implementation process. The study thus concludes that for the implementation to be successful these challenges have to be addressed.

The study further found out that there exist a strong positive relationship between logistic management and cost reduction at KFC (U) LTD. The study thus concludes that increase in the E-Commerce would result in enhanced cost reduction that led to Logistics Performance. This was because it results in increased speed and flexibility of transactions and knowledge transfer allow for more efficient coordination, and eventually higher revenues and profits.

#### **5.2 Summary of the Findings**

##### **5.2.1 The forms of E-commerce used at KFC (U) LTD.**

The study sought to determine the extent that the organization use Electronic Data Interchange (EDI) which is a computer linked upon networks with a mean of 2.78 although some of the respondents had different views as shown by the standard deviation of 1.542. This was supported by Taylor, (2006) who asserts that it is about delivering goods and services to customers as fast as possible. This involves making quick decisions and rapidly moving materials and information

inside the operations. For example, in the context of trade and transport facilitation, 'automated processes' can be a speed performance factor (Quinn, 2000).

Also, the majority of the respondents agreed that organization use scanners which is an electronic device for reading printed barcodes with a mean of 4.00. However; some of the respondents had different views as shown by the standard deviation value of 1.355. According to Bin, (2004), Flexibility is about being able to change the operations to fulfil new requirements. As requirements can change over time, organisations need to develop operations ability to introduce new or modified products and services, as well as to produce a wide range or mix of products and services. Flexibility also involves volume flexibility (the ability to change volume of output over time) and delivery flexibility (the ability to change delivery time).

The study also aimed at determining whether that The organization use Real-time communications capability which supports browser-to-browser applications for voice calling with a mean of 3.88 and some respondents, however, had different views as shown by the standard deviation of 1.136, this was supported by Whinston, (2003) who consistently producing goods and services that meet expectations. The quality objective can be achieved by the provision of error-free products or services that fulfil customer requirements.

### **5.2.2 The Level of Logistics Performance in Organizations**

From the findings, the inventory is controlled well in an organization with a mean value of 3.50. However, some of the respondents had different views as shown by the standard deviation of 1.266. This was because, the special orders sell on occasion and have those products available in a limited quantity to keep your inventory costs down and to develop a positive reputation for quickly filling special orders.

The study adopted the descriptive research design in obtaining information about the study topic where there is information sharing with key players with a mean value of 3.28. However, some of the respondents had different views as shown by the standard deviation of 1.313. This implied that in Burundi, 27% of families experience foodless days. This was supported by the study carried out by Mallard, (2006) who asserts that a good Warehousing system means that you have an up to date inventory count at all times. Part of giving good customer service is giving accurate information even if the customer does not plan on making a purchase that day. By being able to

give clients accurate inventory information, you improve the image of your company and add one more element to customer retention.

The results also indicated that there is proper handling and management of materials. This is revealed by a mean value of 3.50. However, a significant standard deviation value of 1.266 under the same test revealed varied responses from the respondents. This is also in argument that Warehousing helps to maintain customer satisfaction when it comes to product returns. When product is returned because it is damaged or dead on arrival, and it is still under warranty, you can arrange with the manufacturer to do an instant swap of the product to keep the customer happy.

### **5.2.3 Relationship between E-Commerce and Logistics Performance**

The study also sought to determine the relationship between E-Commerce and cost reduction where the majority of the respondents agreed that the use of E-Commerce helps in substantial cost savings in logistics activities. This is revealed with a mean of 3.48. However, a standard deviation of 1.249 from the same test revealed varied responses. Thus, E-Commerce can be seen as a link to cost reduction opportunities. However, the cost saving is not the only objective of E-Commerce. With a mean value of 3.56 however; some of the respondents had different views as shown by the standard deviation of .972.

The results of the survey as table 4.6 above reveals that the use of EDI helps to combine logistics process integration and world class performance with a mean of 3.20 and standard deviation of 1.385 showing that some respondents had different views. Firms in business-to-business markets are embedded in a complex network of relationships with suppliers, customers as well as a number of other stakeholders.

The results of the survey as reflected in table 4.6 suggest that respondents agree that E-Commerce makes possible that firms monitor their inventories, this is shown by a mean of 3.76. However, a standard deviation of 1.492 is a clear manifestation of varied responses from respondents as far as they found a positive relationship between E-Commerce practices and Logistics Performance with the moderating effect of Logistics role.

To results of the survey as reflected in table 4.6 suggest that E-commerce improves the utilization of their transportation and warehouse assets as revealed by the mean value 3.40.

However, a standard deviation of 1.485 reveals varied responses from the respondents found that all E-Commerce practices, except customer relationship, positively affected SC performance. Ibrahim and Ogunyemi (2012) investigated E-Commerce in terms of supplier and customer partnerships, and level and quality of information sharing.

## **6.2 Recommendations**

Based on the study's findings, the study makes various recommendations. The study found out that the KFC (U) LTD had implemented E-Commerce practices to enhance their operations. It is therefore recommended that the other firms adopt these strategies to provide high quality services that will enable them achieve the desired objectives. The study also found out the cost reduction at KFC (U) LTD is predetermined by the E-Commerce strategies employed. The study thus recommends that the management at KFC (U) LTD monitors and evaluates these strategies more often. This will enable them formulate measures to ensure proper implementation and success of these strategies.

The study also established that implementing E-Commerce practices led to incurring of additional costs. The study thus recommends that proper budgetary considerations and plans to be considered before undertaking any process. This will enable determination of the merits and the demerits of that particular process and thus assess its appropriateness.

The study further recommends that Policies and legislation bodies should consider the need for facilitating and setting up policies which will enhance implementation process of E-Commerce strategies in the firm.

The study also recommends that logistics information system be given adequate attention as this strategy is vital to timely customer feedback, information sharing and storage in the organization.

Finally, monitoring and evaluation of all the E-Commerce practices is crucial to excellent cost reduction at KFC (U) LTD. Therefore, management should be keen on the timing and frequency of the evaluation process.

### **5.3 Suggestions for Further Research**

Despite the study being able to address the research questions, few areas are yet to be addressed, requiring further research. To begin with, the study found out that there were challenges faced in the implementation process of E-Commerce practices. The study thus suggests that further studies to be conducted on how these challenges may be addressed.

Also, the study only concentrated on KFC (U) LTD as the case study which may not be an equal representation or provide adequate information on all milk processing companies. The study thus recommends that further studies be undertaken on other firms to enable comparison.

Further research should also be conducted using a different approach in determination of the impact that E-Commerce has on cost reduction. This could be through using other variables other than those used by the study. This will ensure generalization of the results and fully establishing the phenomenon that exists.

Future research could also be conducted using the longitudinal study designs in order to provide a better assessment of how the study variables improve over time.

## REFERENCES

Anderson, D.L. & Quinn, R.J. 2004, "The Role of Transportation in Long Supply Line Just-In-Time Logistics Channels ", *Journal of Business Logistics*, vol. 7, no. 1, pp. 68-88.

Asif, Z. & Mandviwalla, M. 2005, "Integrating the Supply Chain with RFID: a Technical and Business Analysis", *Communications of the AIS*, vol. 15, pp. 393-427.

Ballou, R.H. 2001, "Computer Methods in Transportation-Distribution", *Transportation Journal*, vol. 16, no. 2, pp. 72-85.

Bardi, E.J., Raghunathan, T.S. & Bagchi, P.K. 2006, "Logistics information systems: The strategic role of top management", *Journal of Business Logistics*, vol. 15, no. 1, pp. 71-85.

Bookbinder, J.H. & Dilts, D.M. 2007, "Logistics Information Systems in a Just-In-Time Environment ", *Journal of Business Logistics*, vol. 10, no. 1, pp. 50-67.

Bowersox, D.J. 2008, *Logistics performance : A Systems Integration of Physical Distribution Management and Materials Management*, Macmillan Publishing, New York, NY.

Chatfield, A.T. & Bjorn-Andersen, N. 2001, "The impact of IOS-enabled business process change on business outcomes: Transformation of the Value Chain of Japan Airlines", *Journal of Management Information Systems* , vol. 14, no. 1, pp. 13-40.

Closs, D.J. & Kefeng, X. 2000, "Logistics information technology practice in manufacturing and merchandising firms" An international benchmarking study versus world class logistics firms", *International Journal of Physical Distribution & Logistics performance* , vol. 30, no. 10, pp. 869-86. 625

Closs, D.J., Goldsby, T.J. & Clinton, S.R. 2009, "Information technology influences on world class logistics capability", *International Journal of Physical Distribution & Logistics performance* , vol. 27, no. 1, pp. 4-17.

Das, A. & Handfield, R.B. 2008, "Just-in-time and logistics in global sourcing: An empirical study", *International Journal of Physical Distribution & Logistics performance*, vol. 27, no. 3/4, pp. 244-59.

Dudley, L. & Lasserre, P. 2006, "Information as a Substitute for Inventories ", *European Economic Review*, vol. 33, no. 1, pp. 67-88.

Gomes, R. & Mentzer, J.T. 2004, "A Systems Approach to the Investigation of Just-In-Time ", *Journal of Business Logistics*, vol. 9, no. 2, pp. 71-88.

Gorry, G.A. & Morton, M.S.S. 2007, "A Framework for Management Information Systems", *Sloan Management Review*, vol. 30, no. 3, pp. 49-61.

House, R.G. 2008, "Computer Models in Distribution Management", *Journal of Business Logistics*, vol. 1, no. 1, pp. 129-52.

La Londe, B.J. & Auker, K. 2000, "A Survey of Computer Applications and Practices in Transportation and Distribution", *International Journal of Physical Distribution*, vol. 3, no. 5, pp. 292-301.

Langley, C.J., Carlisle, D.P., Probst, S.B., Biggs, D.F. & Cail, R.E. 2008, "Microcomputers as a Logistics Information Strategy", *International Journal of Physical Distribution and Materials Management*, vol. 18, no. 6, pp. 11-7.

Lewis, I. & Talalayevsky, A. 2000, "Third-Party Logistics: Leveraging Information Technology ", *Journal of Business Logistics*, vol. 21, no. 2, pp. 173-85.

Lieb, R.C. 2002, "The use of third-party logistics services by large American manufacturers", *Journal of Business Logistics*, vol. 13, no. 2, pp. 29-42.

Lieb, R.C. & Bentz, B.A. 2004, "The Use of Third-Party Logistics Services by Large American Manufacturers: The 2003 Survey", *Transportation Journal*, vol. 43, no. 3, pp. 24-33.

Novack, R.A., Rinehart, L.M. & Wells, M.V. 2002, "Rethinking concept foundations in logistics performance ", *Journal of Business Logistics*, vol. 13, no. 2, pp. 233-67.

Perry, J.H. 2008, "Firm Behavior and Operating Performance in Just-In-Time Logistics Channels ", *Journal of Business Logistics*, vol. 9, no. 1, pp. 19-33.

Peters, M.J., Lieb, R.C. & Randall, H.L. 2008, "The use of third-party logistics services by European industry", *Transport Logistics*, vol. 1, no. 3, pp. 167-79.

Porter, M.E. & Millar, V.E. 2005, "How information gives you competitive advantage", *Harvard Business Review*, vol. 63, no. 4, pp. 149-60.

Rabinovich, E., Windle, R., Dresner, M. & Corsi, T. 2009, "Outsourcing of integrated logistics functions", *International Journal of Physical Distribution & Logistics performance* , vol. 29, no. 6, pp. 353-73.

Rogers, D.S., Daugherty, P.J. & Stank, T.P. 2002, "Enhancing service responsiveness: the strategic potential of EDI", *International Journal of Physical Distribution & Logistics performance* , vol. 22, no. 8, pp. 15-20.

Sauvage, T. 2003, "The relationship between technology and logistics third-party providers", *International Journal of Physical Distribution & Logistics performance* , vol. 33, no. 3, pp. 236-53.

Schwarz, L.B. & Weng, Z.K. 2000, "The Design of a JIT Supply Chain: The Effect of Leadtime Uncertainty on Safety Stock ", *Journal of Business Logistics*, vol. 21, no. 2, pp. 231-52.

The forms of E-commerce systems used in our Organization are;	SD	D	N	A	SA
The organization use Electronic Data Interchange (EDI) which is a computer linked upon networks.					
The organization use scanners which is an electronic device for reading printed barcodes					
The Organization uses barcodes which identifies the products					
The organization use Real-time communications capability which supports browser-to-browser applications for voice calling					
The organization use Radio Frequency Identification (RFID) which tracks the cargo					
The organization material requirements planning manages the manufacturing process					
The organization use Enterprise resource planning (ERP) which helps planning for the required stock basing on the customer orders					
The organization uses Electronic mail (e-mail) that are used to share information with the different stakeholders.					

**SECTION C: ACTIVITIES INVOLVED IN LOGISTICS PERFORMANCE IN ORGANIZATIONS**

5 SA=Strongly Agree 4 A=Agree 3 N=Neutral 2 D=Disagree 1 A=strongly disagree

1. They are different activities involved in logistics performance in our Organization and they include;

	SD	D	N	A	SA
The inventory is controlled well in an organization					
There is information sharing with key players					
There is proper handling and management of materials					

Orders are processed basing of the customer orders.					
Goods are wrapped in special and reliable packages					
Transportation facilities are given to customers.					
High degree of customer care					
There is environmental analysis and market analysis					

**SECTION D: THE RELATIONSHIP BETWEEN E-COMMERCE AND LOGISTICS PERFORMANCE**

5 SA=Strongly Agree 4 A=Agree 3 N=Neutral 2 D=Disagree 1 A=strongly disagree

The relationship between E-commerce and logistics performance is that it;

	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
The use of E-Commerce helps in substantial cost savings in logistics activities.					
The E-Commerce facilitates logistics information collection and exchange					
the use of EDI helps to combine logistics process integration and world class performance					
E-Commerce makes possible that firms monitor their inventories.					
E-commerce improves the utilization of their transportation and warehouse assets					
Using RTID helps to track goods in transit					
E-Commerce helps to facilitate Records management in logistic performance					
E-Commerce creates Security of inventory for logistic organization					
E-Commerce leads to Monitoring of stock the organisation					
using E-Commerce leads to proper Materials management					

**Thanks for your cooperation.**