# IMPACT OF KENYA TRADENET SYSTEM ON OPERATIONAL PERFORMANCE OF BULK IMPORTERS PHARMACEUTICAL COMPANIES IN NAIROBI

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# **DECLARATION**

| This research project is my original work and has                                       | not been presented for award in any |  |  |  |
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# **DEDICATION**

I dedicate this project to God my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. I also dedicate to my late dad, my mother, sister, wife and my son who have supported and encouraged me throughout the course and teaching me that even the largest task can be accomplished.

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# ABREVIATIONS AND ACRONYMS

**DC** Developing Countries

**GDP** Gross Domestic Product

**GHRIS** Government Human Resource Information System

**GL** General Ledger

**IBM** International Business Machines

ICT Information, Communication and Technology

**IFMIS** Integrated Financial Management Information Systems

IT Information Technology

**R&D** Research and Development

**RBV** Resource Based View

**SC** State Corporation

**SPSS** Statistical Package for Social Sciences

**TAM** Technology Acceptance Model

### **ABSTRACT**

This research made use of a descriptive cross-sectional research design which was meant to help the study address the following specific objectives: to analyse the effects of Kenya TradeNet system on operational performance of bulk importer pharmaceutical companies in Nairobi, to determine the challenges of implementing Kenya tradenet systems among bulk importer pharmaceutical companies in Nairobi. There was no need of sampling and the study population consisted of registered pharmaceutical companies in Nairobi, Kenya which was 23 pharmaceutical companies according to Export processing zone project on Kenya's Pharmaceutical Industry. Tables which presented frequencies and percentages were used to present the analysed data. Data was analysed using SPSS version 23 and this helped in giving output which included measures of central tendency. It came to the researcher's attention that there were a number of challenges and predicaments that affected the implementation as represented by a mean of 4.075 an implication the study respondents were in agreement that their firms encountered the challenges. Respondents agreed that Kenya tradenet system implementation was affected by seventy percent of the challenges. In regard to extent to which independent variables affected operational performance, findings indicated that strong lead Agency and the development of impeccable boundaries on projects carried and objectives as well as Partnership between government and trade was agreed by respondents to have higher impact on operational performance of bulk importer pharmaceutical companies in Nairobi. The study findings also revealed positive and significant association amongst Kenya trade net best practices and operational performance of bulk importing pharmaceutical of organisations located in Nairobi therefore the top management of the interview firm said pharmaceutical firms needs to develop a long-lasting association among tradenet top and middle management activities and operational performance so that there can be a responsive institution. Therefore, to relationship between variables positive relationship was revealed from the findings and therefore independent variables that were studied explained sixty-four percent of the operational performance as exemplified by the R<sup>2</sup>. The adoption partnership between government and trade, user friendliness and accessibility, Political will, development of proper boundaries for the organisation projects and objectives and strong lead agency best practices will result in an increase of pharmaceutical firm's performance by their respective percentages. Findings suggest that the most prevailing best practices affecting operational performance of pharmaceutical firms in a bigger way is user friendliness and accessibility as well as political will and establishment of clear project boundaries and objectives. The research also concluded that understanding of Kenya tradenets systems and operational performance is critical to any pharmaceutical firms because such firms works in a very competitive and dynamic environment which requires consistent adjustments as per changes in both internal and external environments.

### **CHAPTER ONE: INTRODUCTION**

### 1.1 Background of the Study

Overtime, global economies have been in a mission of expansion. Africa as a continent is doing well in terms of economic growth based on continent empowerment internally and externally. Specialists have distinguished that, among others, territorial and global trade have been noted by many scholars as one ingredient for economic growth, development and advancement in the nation, local and landmass. As time goes, initiatives have been carried for proficiency inside this division. Truth be told, a far cry have been accomplished, which have brought about positive outcomes, regarding expanded efficiencies and towards the general account of a Global Village (Davila, 2014). One such exertion is the usage of a Single Window System. More or less, the framework incorporates all trade-related government organizations and other private elements, for example, banks and insurance firms, into a solitary window, inside which the trader can interface with these offices. This guarantees documentation is done electronically, accordingly riding the procedure of manual accommodation of records (Alink and Van Kommer, 2009).

Like any other developing nations, Kenyan government has perceived the significance of technological innovations in delivering immediate and efficient services to the public through introducing technology in different public sectors (Bon & Mustafa, 2013). The Government built up the Kenya Trade Network Agency (KENTRADE) in January 2011 to actualize, operationalize and deal with the Kenya National Electronic Single Window System as known as Kenya Trade Net System and to encourage trade. The general goal

of the Kenya Trade Net System is to encourage International trade by diminishing deferrals and bringing down expenses related with freedom of products at the Kenyan fringes, while keeping up the essential controls and accumulation of levies, fees, duties and taxes, where relevant, on imports or fares. The delays experienced in the cargo clearance process were occasioned manual exchange of documents among multiple players involved in the process who were located in different locations. By providing a single electronic platform for exchange of data/information the Single Window System has to a large extent achieved this objective (GOK, 2016).

### 1.1.1 Kenya TradeNet System

Kenya TradeNet System is a national electronic single window system established and implemented by the government to facilitate trade (UNCTAD, 2012). A Single Window System has been defined differently by various players in trade logistics. For instance, UN/CEFACT depicts a Single Window as a system that enables traders to hold up data with a single body to satisfy all import or fare related administrative necessities. The World Customs Organization (WCO) characterizes it as an office that permits parties engaged with internal and external trade, logistics and transport to stop institutionalized data and archives from a single section point to satisfy all import, fare, and travel related administrative necessities. Best practices necessitate that a Single Window System is overseen halfway, to empower suitable Government Agencies and Authorities to get and receive information applicable to them from the business for appraisal and endorsement (Bon and Mustafa, 2013).

The Kenya TradeNet System has provided an electronic platform for submission of documents by business community from anywhere to government officials for processing and approval. The System has also integrated electronic Systems of Government Agencies involved in the cargo clearance processes in Kenya. The System is integrated with the payment instruments through the Kenya revenue Authority (KRA) iTax Platform and the eCitizen to enable business to make payments to government electronically. Documents lodged through the Kenya TradeNet System are electronically accessible at all the Border Posts to Government Regulatory Agencies prior to the arrival of cargo at the Borders. This provides Government Agencies with ample time to target cargo before arrival at the Border Posts, and plan for verification where necessary in advance (GOK, 2016).

Apart from the Government Agencies, the private sector stakeholders such as Clearing & Forwarding Agents, Shipping Lines and Shipping Agents, Banks, Transporters, Insurance Companies, Chamber of Commerce, Airline Operators, Ground Handlers etc, are enjoying the usage of the System. The System is web based and is accessible on 24/7 basis everywhere as long as one is connected to the internet. All the 21 modules of the System have been successfully rolled out. The number of system users has gradually increased to over 9000. There are 41 stakeholders including 31 partner Government agencies (PGAs) on board the System. KENTRADE is working with a few remaining PGAs to bring them on board the System (UNCTAD, 2015).

The objective is to in the long run coordinate the System into the EAC Regional Single Window stage like the Association of South East Asian Nations Single Window System, which has changed the district into extraordinary compared to other coalitions in trade

help globally. The governments remain to profit as the System ensures expanded assessment income and improved consistence with the law. Traders will enjoy faster clearance times, and a more straightforward and unsurprising procedure that empowers them to plan and move merchandise quicker. The new activity is a potential help to the area (GOK, 2016).

### 1.1.2 Operational Performance

Operational Performance (OP) is the process of aligning units of business in an institution to enhance the combine working in order to attain major business goals (Sudarsana, Sivarami & Mohan, 2015). Schapper, Malta and Diane (2006) noted that the importance of procurement reform in public sector for most upcoming countries is progressively more valued by global agencies of development, in recognition to the socio-economic costs and limitations in governance of public operations are comprised by an increment in sovereignty threats that brought about by foreign investment representation (Kishor, Sajeev & Callender, 2013). Procurement public contributes in reduction of expenditure and encourages growth of economy an increase in attention to policy.

According to Agaba and Shipman (2007) frameworks of public procurement found in first and third world economies are acknowledged to be typified through unsteady pressure among the expectations of public accountability and transparency, as well as efficient and effective management of resources. Muthoni (2010) alluded that any organization which does not adapt good operational performance practices is disadvantaged given that it will not achieve its goals and objective. Koskey (2010) further states that as much as the government has set up rules and regulations on how procurement should be done in all government institutions the need to have a good

managerial good will in order for the effective of the procurement function is more than important for the procurement process in the organization than ever before.

The four key indicators cited to determine performance of operations are: Firstly, improvement of operations – streamlines, simplifies and standardizes. Operational performances are efficient economy's foundation. Inefficiency as well as lack of value addition in activities should be avoided (Kishor, Sajeev & Callender, 2013). Secondly, productivity tracking – what is tracked gets done. This is carried out through different avenues; however, technology advancement has resulted to an automated production being tracked in the current software invention (Bakker & Schaufeli, 2008). Thirdly, engineered standards - a goal is important to all. Standards that are engineered can be created via studies in motion and time as an objectivity instrument to estimate performance of individual. Fourthly, programs on incentive performance - Pay-for-Performance and Rewards, this can be done through different avenues to performance rewards. Incentives promote great level performance. Nature of human being is that they seem to bring out their utmost results. Programs for rewards tend to inspire workers as they feel valued for their work and this leads to high performance (Van Weele, 2010).

### 1.1.3 Pharmaceutical Companies in Kenya

According to EPZ (2015), the pharmaceutical industry in Kenya has continued to increase in size despite the challenges of technology, legal policies and changing consumer demand. The pharmaceutical industry can be categorized into; manufacturers, distributors and retailers. Kenya being one of the DC on the planet, the pharmaceutical business is seen to include half of the district's market.

Kenya is presently the biggest maker of pharmaceutical items in the Common Market for Eastern and Southern Africa (COMESA) region, providing about half of the locales' market. Out of the area's assessed of 50 perceived pharmaceutical producers; around 35 are situated in Kenya. It is approximated that around 9,000 pharmaceutical items have been enlisted available to be purchased in Kenya. Cosmos Limited, Dawa Limited and Universal pharmaceuticals are some of the manufacturing companies operating in Kenya. Most of these companies are located within Nairobi and its environs and focus on repackaging and processing of bulk drugs into small quantities (UNIDO, 2011).

Currently, there are over 14,000 registered pharmaceutical products in Kenya, KEMSA being the largest purchaser of drugs manufactured both locally and imported. It buys about 30% of the drugs in the Kenyan market and ensures effective distribution to government medical institutions such as the dispensaries, health centers and county hospitals. Therefore, it is approximated that there are about 297 registered wholesale and 3859 retail dealers of pharmaceutical products in Kenya (Pharmacy and Poison Board, 2015). Local pharmaceutical organizations in Kenya confront rivalry on two fronts which incorporate contending with one another and confronting firm rivalry from imports (UNIDO, 2010). It is expected that the implementation of Kenya TradeNet system will lead to improved performance by bulk importers pharmaceutical firms in Nairobi by enhancing efficiency of imports and exports.

### 1.2 Research Problem

Without a single window system, traders wind up bringing about high cost of doing business, encounter very long lead times and inaccurate handling of information because of manual procedures which may prompt fines (NEPAD, 2010). The government likewise experiences complex controls set up by the diverse offices and organizations that may exist, there is near zero straightforwardness, trouble in checking different procedures and colossal loss of incomes due to increased defilement. It is a direct result of the current condition of occasions that the Single Window System would come in to help all partners associated with the procedure (Jack, 2012). Advantages of execution incorporate better harmonization and sharing of information crosswise over government systems henceforth enhanced proficiency, enhanced straightforwardness of authority controls, expanded income gathering by the government, diminished expenses of working together for both the government and exchanging network, expanded national aggressiveness and a noteworthy decrease in transaction times (Oyeyinka, 2006).

A significant number of pharmaceutical firms in Kenya have benefited from implementation of the Kenya tradenet system. The organizations have profited from straightforward and unsurprising understanding and use of guidelines, sending of both financial and human capital, bringing about considerable increase in profitability and intensity. Estimation of an office for administrations and dealers has gone up against expanded significance in the new security condition with its accentuation on development information and risk examination. Kenya TradeNet System likewise has an inbuilt insight that empowers pharmaceutical firms that rely upon east Africa's financial entryway ocean Port of Mombasa, air terminals and land outskirt presents on track, clear and move their

products crosswise over fringes a lot quicker, less demanding and less expensive through a rearranged cargo clearance process (UNCTAD, 2015).

Different studies have been done on the subject of technological innovations by various researchers but few studies if any have studied on single window system as a technological innovation. Abeywickrama and Wickramaarachchi (2015) conducted a study to distinguish the difficulties that ruin the improvement of a single window system in Sri Lanka. Subjective methodology was received with an organized survey disseminated to 30 cargo sending organizations in Sri Lanka. It was discovered that the Sri Lankan system isn't perfect with the single window idea definitions. As indicated by the Sri Lankan cargo forwarders, the most basic difficulties of single window execution are "Absence of government bolster", "Deficient coordination between Stakeholders", "Association and human protection from change". The main two basic difficulties are strategic dimension difficulties, which require government and abnormal state key leaders to effectively take their parts in the formation of political will and bury agency joint effort. Worch and Truffer (2012) found that overall productivity and value maximization of the firm is enhanced by operations innovation. A study by Hafeez (2013) established a strong positive relationship on companies' profitability against value added innovativeness.

Locally, Kiraka, Kobia, and Katwalo, (2013) established that process, product, positioning and paradigm types of innovation had a positive performance relationship in some business types of the micro and small enterprises. Odhiambo (2008) established that Standard Chartered Firm (Kenya) Limited bank has been able to successfully

introduce various innovative strategies ranging from product, technological to customer care thus contributing enormously to its profitability over the years. Kiiyuru (2014) established that the commercial banks in Kenya had employed value creation through resource availability, customer satisfaction, retention and pricing in form of market innovation strategies. It ought to be featured that over the span of the study, there is next to zero scholastic writing specifically identified with the Single Window System. This specific investigation can fill in as a basis inside which different researchers and academicians can expand on. The research therefore aimed at fill this literature gap by answering these questions; what is the level of adoption of Kenya TradeNet system by bulk importers pharmaceutical firms in Nairobi? And what is the effect of Kenya TradeNet system on operational performance of bulk importers pharmaceutical firms in Nairobi?

### 1.3 Research Objectives

The study sought to determine the impact of Kenya TradeNet system on operational performance of bulk importers pharmaceutical firms in Nairobi. The specific objectives of the study were:

- i) To determine the challenges of implementing Kenya TradeNet system among bulk importer pharmaceutical companies in Nairobi.
- ii) To establish the effect of Kenya TradeNet system on operational performance of bulk importer pharmaceutical companies in Nairobi.

### 1.4 Value of the Study

The finding of the investigation frames an empirical data to specialists, academic and corporate researchers and higher learning students who may further research on the equivalent or corresponded area of study. This research may as well be useful to researchers and analysts in distinguishing proof of additional regions of academic and corporate research on areas similar to investigations by featuring related subjects that require further research and checking on the exact writing to set up research areas for further studies. The investigation adds essentially to mechanical advancements in people in general division.

The research findings will primarily enlighten policy makers by showing them how Kenya TradeNet system impacts on operational performance of both public and private institutions and thereby identify mechanisms to be utilized by the regulators to improve performance of such firms which form the framework for achievement of economic growth and development goals of vision 2030. The study will also be geared towards helping firms which are yet to adopt Kenya TradeNet system. The management of these firms will be able to determine the Kenya TradeNet system suitable for them to enhance organizational growth and operational performance.

Finding from the study forms a foundation for implementing an effective Kenya TradeNet system. The study would help the Government of Kenya in formulation and implementation of policies for operational efficiency. Through the results of this study, the government pharmaceutical companies would find the benefits realized and how more benefits can be realized for optimal operational efficiency.

### **CHAPTER TWO: LITERATURE REVIEW**

### 2.1 Introduction

The chapter presents a review of literature that relates to the research. It entails theoretical literature review, determinants of operational performance. It finally gives the empirical literature review including local and globally studies, summary of literature review and lastly the conceptual framework.

### 2.2 Theoretical Review

This study was based on three theories. These are diffusion of innovation theory, the firm's resource based theory and the technology acceptance model. The theories are as discussed below.

### 2.2.1 Resource Based View Theory of the Firm

This hypothesis contends that maintained upper hand and enhanced execution by a firm might be acknowledged by misusing profitable, uncommon, non-substitutable and incompletely imitable assets (Hart, 1995). A significant asset or heap of assets enables a venture to bridle openings and diminish dangers in its condition. An uncommon asset or heap of assets is one that isn't controlled by countless. A non-substitutable asset or heap of assets is one for which a proportional asset can't undoubtedly be made by contending organisations. An incompletely asset or heap of assets is usually hard to imitate or one that can be repeated at a critical price (Hart, 1995). Daft (1983) records these assets to incorporate all abilities, resources, hierarchical procedures, learning and data controlled by a firm.

The agreement between sellers and buyers concerning the reduction of lead time in conducting business activities takes time, but such learning is strongly directly related to how the supplier will perform and how costs will be minimized in supply chain relationships (Carter, 2005). The RBV theory has been subjected to a lot of criticisms for the past 20 years in which it has been in existence. However, in response Wagner (2006) contends that the prominent source of superior performance is causal ambiguity.

This situation make it difficult for firms since they cannot manage the resources which they are not aware about their existence though it might be necessary for survival in the dynamic environment which comes with the risk of converting prior strengths into weaknesses. Wagner (2006) contends that technological innovations are defined as the desirable practices acquired from efficient technologies. Desirable practices will support the technological functions in the delivery of services of high quality and sustain superior performance therefore technological innovation frameworks are resources that fit in RBV since it causes enhanced service provision as well as performance.

Under RBV by exploiting technological innovation practices, pharmaceutical companies build capabilities for improved operational performance. This theory relates with the research since it acknowledges that organisations have their established way of doing things and share resources among themselves that may be applied in improving organizations' performance.

### 2.2.2 Diffusion of Innovation Theory

Diffusion of Innovation refers to the communication of an idea which is considered to be novel to the members of a social system through certain preferred channels (Rogers, 2003). The spread of new ideas is impacted by four variables which are: the actual innovation, social systems and time and communication channels. Of utmost importance is innovations have to gain acceptability in a wide area in order to be sustainable. According to Fisher (1971), adoption of innovation when mapped in the long run forms an S shaped curve. This curve begins with the innovators, early adopters, early and late majority and finally the laggards.

How successful an innovation will be stems from the resolutions put forward by the social systems through five defined steps which are; knowledge: such as innovation awareness and continuous learning regarding it; persuasion which means willingness to have detailed knowledge concerning the innovation; Resolution i.e. consideration of the advantages and disadvantages of the innovation and choice of whether to adopt the innovation; Application i.e. an examination of how useful the innovation will be and confirmation i.e. eventual decision on the continual use of the innovation (Rogers, 2003).

The diffusion of innovation model though falls short of explaining the importance of the capability and the dynamics of different inter-connected trading partners and the influence of power between trading partners (Hart & Saunders, 1997). According to Lundblad (2003) the inclusion of different inter-organization partner is very critical in the success of the adoption of the innovation systems and their applicability. It also lacks specificity (Sanson, 2004).

Rogers (1995) describe communication channel as a critical contributor to the success of adoption of new innovation in the organization. As an effective communication channel create prior awareness of the new technology. The trading partners need to work together

to ensure the success of technological innovations. This will be determined by the interconnected industry the organization is in and how influential that organization is to its trading partners (Lundblad, 2003). This theory guided the study of the adoption of various technological innovations in businesses. This theory argues that innovation spreads progressively through time and people bringing about a number of adopter categories.

### 2.2.3 The Technology Acceptance Model (TAM)

This model clarifies the way clients embrace/acknowledge and utilize an innovation. TAM was found in 1989 by Davis. This model asserts that once a client is given an alternative innovation, some aspects influence their choices on the means and time of utilization. This incorporates its apparent convenience and seen helpfulness. Different variables like clients, contenders, monetary components and outside impacts from providers were not taken into consideration by the TAM (Van Akkeren & Harker, 2003). TAM embraces settled causal chain of genuine conduct convictions, goal and disposition. This was produced by social clinicians from the hypothesis of contemplated activity. In Davis' study, two vital parts are recognized; seen convenience and seen helpfulness (Davis, Pallister & Foxall, 2002).

These views can be used to find out the attitudes towards a given adoption of a system. The attitude develops the intentions that cause actual system usage and the user intentions to use. In other studies regarding technology, TAM is widely adopted and greatly contributes to the development of a prediction of an individual's usage of technology (Fishbein & Ajzen, 2010).

In post adoption studies, perceived usefulness of a technology influences the satisfaction level (Hirt & Cheung, 2007) and a given technology's perception (Hikmet & Anol, 2008). Perceived ease of use influences the perceived usefulness and the intention for adoption (Davis, 1989). Despite TAM being an important source for theoretical framework in the study of adoption and use of technology it has many limitations which include the initial purpose designing the model which is parsimony and generality (Dishaw & Strong, 1999), not taking into consideration non-organizational setting of the organization (Davis & Venkatesh 2000), and ignoring the factors which moderate the adoption of ICT (Sun & Zhang, 2006).

This theory affected research in acceptance of technology. In this exploration, TAM was utilized as a part of three distinctive routes, specifically to discover how the utilization of technology enhances hierarchical administration conveyance to natives, how staff technology preparation impacts the utilization of technology in pharmaceutical companies and how the accessibility of technology offices impacts the utilization of technological innovations in pharmaceutical companies.

### 2.3 Kenya TradeNet System Best Practices

The effective presentation and execution of a Single Window idea solely lies on an impressive degree on specific requirements and achievement determinants that fluctuate between nation to nation further task to task. A portion of the achievement factors gathered from an audit of the activity and improvement of Single Windows in different nations embraced by the UN/CEFACT International Trade Procedures Working Group are recorded underneath; Partnership among Administration plus Trading. A Single Window is a down to earth show for co-activity among the departments inside the

administrating government. It shows a decent open door for an open secluded association in the foundation and activity of the scheme. Therefore, agents from all significant open and secluded segment interventions ought to be welcome to take an interest in the advancement of the system from the start. This ought to incorporate support in all phases of the venture, from the underlying advancement of undertaking goals, situational examination, and task plan through to execution. A definitive achievement of the Single Window will depend fundamentally on the association, responsibility and status of these gatherings, to guarantee that the system turns into an ordinary element of their business procedure.

Ease of use and Accessibility are key components for the achievement of a Single Window venture. Exhaustive working directions and rules ought to be made for clients. Help Desk and client bolster administrations, including preparing, ought to be built up, particularly in the early execution period of the task. The Help Desk can be a helpful means for gathering input information on territories of trouble and bottlenecks in the system and this information can be an important apparatus in its further advancement. The requirement for and estimation of down to earth instructional classes for clients can't be over-underlined, particularly in the early usage period of the undertaking.

Foundation of Clear Project Boundaries and Objectives. Likewise, with any task, setting up unmistakably characterized objectives and targets for the Single Window at the beginning will be of great significance direct the venture via different improvement operational stages. They ought to be founded on a watchful examination of the necessities, desires and financial and human resources of partners, and furthermore on the current framework and current ways to deal with the accommodation of trade-related

information to government. As expressed already, this investigation ought to include every key partner from both government and trade. A Single Window ought to by and large be seen as a component of a nation's general methodology to enhance trade help (UNCTAD, 2015)

Solid Lead Agency. Identified with the requirement for political will is the prerequisite of a solid, clever and enabled lead association both to dispatch the task and see it through its different advancement stages. This association must have the fitting political help, lawful expert, human and financial resources, and connections with the business network. Moreover, it is fundamental to include a solid individual inside the association will's identity the undertaking champion.

Distinguishing proof of hindrances. It is conceivable that all parties in the government as well as trade won't be accept the execution of a Single Window. In such cases, the explicit worries of adversaries ought to be recognized and tended to as ahead of schedule as conceivable in the task. Distinguished impediments ought to be considered exclusively, considering the local circumstance and necessities. Unmistakably, implementation cost can be a noteworthy snag yet and should be adjusted in relation to future advantages as portrayed in area. In any case, it is imperative to be clear about the financial ramifications of the venture with the goal that the choice in regards to full or staged execution can be made. Legitimate issues likewise establish a critical potential issue area.

Correspondence Strategy. Building up a legitimate instrument for keeping all partners educated on venture objectives, destinations, targets, advancement (and troubles) makes

trust and stays away from the kind of misconception that can prompt the fixing of a generally decent task. Inside this specific circumstance, it is critical to deal with partners' desires legitimately, and it merits recalling the business maxim of promising less and conveying increasingly. It is additionally vital to recall that partners regularly don't expect wonders: taking care of basic reasonable issues can produce noteworthy goodwill to help the venture through troublesome fixes along the improvement way.

### 2.4 Operations Performance Measurement.

As observed by Huse and Gabrielsson (2004), the implementation of a strategy must be done as planned improve the general performance of operations successfully, this should have followed by abandon of the thought by executives that lower-level managers tend to have similar strategic thinking and its execution of fundamental principles, as well as the necessity. Reforms of governments are based on the perception that procurement in public sector is a tool which is effective in following a varied range of social objectives. Often, debates on policies tend to incline on the expansion of the line of goals instead of assessing the compatible potentiality of the approved objectives.

According to Brennan (2007) measuring performance of operations in the procurement department is key to an increasing vital function of supply chain in an economic downturn. Raw material together with service cost reduction enable organizations to have a competitive advantage on the prices of end goods to thrive well in competitive business world. The key challenge is that the solution has to be gotten before going to issue of compatibility (Cornelia, Muhumuza, & Basheka, 2010).

Operational performance has a significant impact on organizational performance therefore organizations need ways of assessing performance of its operations function and operations management. Operational performance measures include customer satisfaction, quality, and speed of delivery, productivity, flexibility, cash flow, market share, innovation and learning. Quality is consistent conformance to customer expectations. Quality is a fundamental measure since it's a major influence on customer satisfaction and loyalty. Speed of delivery is critical in choosing goods and services for customers and its' greatly affected by speed of decision making and flow of materials and information in all operations involved in product or service production, (Slack et al, 2010).

Flexibility is a measure of how a firm can vary its operations activities to cope with unexpected circumstances and offer individual attention and it determines the agility of firm operations which saves time, speeds response, and ensures dependability. Productivity is a measure of firms' operations activities ability to reduce cost of inputs while maintaining level of its output which reduces operations cost, increases firm profitability and reduces cost to customers, (Slack et al, 2010). Customer satisfaction is an overall measure of how firms operations produce products and services that surpass their consumers' desires and expectations. Its critical determining market shares and cash flows and its' affected by quality, flexibility, speed and productivity of firm operations, (Kumar et al., 2010).

### 2.5 Empirical Review

A number of empirical researches have been carried both internationally and locally on technological innovations and its impact on operational performance but most of these studies concentrated on other technological innovations and not a single window system. Nyagah (2006) in his research in an examination of basic achievement factors for effective usage of enterprise resource planning (ERP) Systems in Kenya featured a few realities about ERP system that (ERP) systems has developed as the center of fruitful information the executives and the enterprise spine of associations and in the previous couple of years numerous organizations in Kenya have put a great deal of capital in information systems, for example, ERP system to help from straightforward transaction preparing systems to complex bury hierarchical systems and most organizations in Kenya are trying unglued endeavors to actualize ERP system, these systems are promoted as ideal answer for the authoritative issues of information the executives.

Karimi (2010) did a research in an investigation of the business value of enterprise resource planning systems by firms in Kenya ,he studied thirty three organizations in Kenya that were using ERP systems and highlighted that, ERP systems emerged as the core of successful information management and the enterprise backbone of the organizations, it speeds up communication of information throughout the organization, act as the motivator to the organizations looking to implement the systems and that ERP systems are very costly in terms of procurement, installation and user training costs. However he indicated that after implementation and adoption of ERP systems organizations obtain business value when the benefits outweigh the costs incurred. He also found out that the ERP systems in Kenya is slightly more than a decade old but in other parts of the world it has been in existence for long, and finally pointed out that enhancement of performance is the key benefit of ERP system.

Jonde and Kimanzi (2014) analysed the IFMIS effectiveness and public sector performance in Kenya. Management of public finance is being scrutinized by community of donor and public in accountability enhancement among the expenditures of government public service delivery improvement. Their research revealed that there was effectiveness in financial reporting through IFMIS, internal controls, budgeting and government projects implementation. However, there were barriers in internal controls. The research further discovered a positive relationship between IFMIS effectiveness and management of public finances.

Abeywickrama and Wickramaarachchi (2015) conducted a study to distinguish the difficulties that upset the advancement of a single window system in Sri Lanka. Qualitative methodology was received with an organized survey conveyed to 30 cargo sending organizations in Sri Lanka. It was discovered that the Sri Lankan system isn't good with the single window idea definitions. As per the Sri Lankan cargo forwarders, the most basic difficulties of single window usage are "Absence of government support", "Lacking coordination between Stakeholders", "Association and human protection from change". The main two basic difficulties are key dimension difficulties, which require government and abnormal state vital chiefs to effectively take their parts in the formation of political will and bury agency joint effort.

### 2.7 Conceptual Framework

This is a diagrammatic presentation of the experiential, observational and the synthetical aspects system that is being established. It outlines key concepts and variables and the linkages between them. The research is seeking to establish the impact of Kenya TradeNet system on operational performance of pharmaceutical firms.

Figure 2.1: The Conceptual Framework

Kenya TradeNet System

**Operational Performance** 

# **Kenya TradeNet System**

- Partnership between
   Government and Trade
- User Friendliness and Accessibility
- Clear Project Boundaries and Objectives
- Political Will
- Strong lead agency

**Operational Performance** 

- Cost Reduction
- Productivity
- Flexibility
- Quality Products
- Speed of delivery

Independent variable

Dependent variable

Source: Author (2018)

### CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1 Introduction

Chapter three discusses techniques of study applied in the determination of the effects of Kenya TradeNet system on operational performance of bulk importer pharmaceutical firms in Nairobi, determine the challenges of implementing Kenya Tradenet system among bulk importer pharmaceutical firms in Nairobi. It also shows the research design, the population, criteria of collecting data as well as its data analysis.

### 3.2 Research Design

Descriptive cross-sectional design was used for the study. A descriptive study involves a description of all the weather of the population. It allows estimates of a half of a population that has these characteristics. Identifying associations among numerous variables is doable, to determine if the variables area unit either freelance or dependent. Cross-sectional study methods are done once and they represent summary at a given timeframe (Cooper & Schindler, 2008).

### 3.3 Target population

Target population for this research was the registered bulk importer pharmaceutical companies in Nairobi, Kenya. According to Export processing zone project there are 23 bulk importer pharmaceutical industries. Since the firms are finite, there was no need of sampling. Therefore, a census survey was undertaken.

### 3.4 Data Collection

The research made use of primary data which was acquired via a questionnaire which was structured and made use of Likert Scale. Targeted respondents in this study was

operational managers of bulk importer pharmaceutical organisations operating in Nairobi County. The major reason behind this choice was because they are involved in the importation and exportation in the organization and therefore a clear elaboration of the Kenya Trade net system.

Questionnaires were administered by the researcher to one respondent in each organization. More structured responses were achieved by the use of the close-ended questions such as the ratings for various attributes which reduced cases of receiving similar responses. The research instrument was personally administered by the researcher in order to reach out to various respondents. Care and control was achieved by keeping a register of all the questionnaires sent to the field.

### 3.5 Data Analysis

This study employed two ways in data analysis phase. Descriptive data in nature was processed in to usable output using SPSS. Content analysis was used to analysed qualitative data, presented in prose form and visualized by Tableau Software version 10.0. Regression analysis was applied in analyzing the quantitative data since it involves one dependent variable and multiple independent variables. The findings from the quantitative data is presented in tables.

Regressions analysis is used to analyze whether there is a relationship that exists between one dependent variable and one or more independent variables. The multiple regression model are used as represented:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

In which;

Y= Operational performance

 $\alpha$  = Constant Term; it is the Y value when all the predictor values are zero

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$  = Beta Coefficient of variable i which measures whether there is responsiveness of Y to change in i

 $X_1$  = Partnership between Government and Trade

X<sub>2</sub>= User Friendliness and Accessibility

X<sub>3</sub>= Establishment of Clear Project Boundaries and Objectives

X<sub>4</sub>= Political Will

 $X_5$  = Strong lead agency

E=Error term

The F- test and t – test is were used in significance testing and this was done at a 95% confidence level. F test was carried establishing a to ascertain the statistical significance of the straight line regression equation whereas the t statistic is applied in testing statistical significance of coefficients.

**Table 3.1: Summary of Methodology** 

| Objectives                     | Section of    | Analysis                |
|--------------------------------|---------------|-------------------------|
|                                | questionnaire |                         |
| Determine the challenges of    | Section B     | Graphical and           |
| implementing Kenya TradeNet    |               | descriptive statistics. |
| system                         |               |                         |
| Establish the effect of Kenya  | Section C     | Graphical and           |
| TradeNet system on operational |               | descriptive statistics. |
| performance                    |               |                         |
|                                |               |                         |

### CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

### 4.1 Introduction

This chapter covers the presentation, interpretation and discussion of the findings. The aim of this study was to establish the extent to which Kenya Tradenet system influence operational performance of bulk importers pharmaceutical companies in Nairobi and to determine the challenges of implementing Kenya tradenet systems among bulk importer pharmaceutical companies in Nairobi.

### **4.2 General Information**

This research population of the study constituted 23 bulk importer pharmaceutical companies in Nairobi and out of 23 questionnaires that were issued to the respondents, 18 responses was obtained. This gives a response rate of 78%. The study did not achieve a 100 per cent response rate because some of the questionnaires were not fully filled and others had some inconsistent information. However, Kothari (2004) indicates that a 50% and above response rate is adequate for analysis and making inferences and hence this gave the researcher a go ahead with the data analysis.

The general information on the questionnaire administered to the respondents comprised of the management level, work experience and departments where respondents work. From biographic information analysis, majority of the respondents (44.4%) were from middle level management followed by those in lower level management (38.9) and lastly from senior level management constituting 16.7% of the respondents. From these findings it was concluded that the organizations was well represented in all levels and

their responses could be used adequately for the study since they all had adequate responses of pharmaceuticals companies.

The respondents were further asked to indicate the years of experience that they had worked at their respective pharmaceuticals firms. The findings indicated that 38.9% of the respondents had a work experience between 5-10 years, 33.3% of the respondents had work experience of above 10 years and lastly 27.8% of the respondents had work experience of below 5 years. The findings indicated that the majority of respondents have worked with pharmaceuticals firms for a period of between 5-10 years hence from these findings it indicates that most of the respondents had adverse experience in the field and had knowledge on the data sough on Kenya tradenet systems and their impact of operational performance. Most of the respondents indicated to working in sales and operations departments respectively.

## 4.3 Challenges of Implementing Kenya Tradenet System Among Bulk Importer Pharmaceutical Companies in Nairobi

The first objective of this study was to determine the challenges of implementing Kenya tradenet system among bulk importer Pharmaceutical companies in Nairobi. To ascertain this, descriptive statistics was used. The respondents were asked to indicate the extent to which they have encountered various challenges on a Likert scale was used where 1 signified strongly disagree, 2 signified Disagree, 3 signified Neutral, and 4 signified Agree and 5 signifying strongly agree. Research findings are further presented in table 4.1.

**Table 4.1 Challenges Distribution** 

| Challenges   | Mean   | Std. Deviation |
|--|--------|----------------|
| Incompatibility of the design system with the real ICT capacities        | 4.4444 | .51131         |
| Lack of a strong, resourceful and empowered lead organization            | 4.3889 | .50163         |
| Lack of continuous training in the implementation of the system          | 4.3333 | .68599         |
| Failure by the government to provide resources                           | 4.2778 | .75190         |
| The lead organization lacks the appropriate legal authority.             | 4.2778 | .75190         |
| The lead organization lacks adequate human and financial resources       | 4.2778 | .66911         |
| Failure by traders to provided resources                                 | 4.2222 | .64676         |
| Inefficiencies with the help desk and user support services              | 4.2222 | .73208         |
| Lack of participation from relevant public and private sector agencies   | 4.1667 | .70711         |
| Lack of comprehensive operating instructions                             | 4.1111 | .75840         |
| Lack of traders commitment in the implementation                         | 4.1111 | .67640         |
| Having goals that are not based on a careful analysis                    | 4.0556 | 1.05564        |
| The lead organization lacks appropriate links with the businesses        | 4.0000 | 1.08465        |
| Lack of proper dissemination of clear and impartial information          | 4.0000 | 1.08465        |
| Government having slightly low political will                            | 3.9444 | 1.10997        |
| Inadequate analysis on the organisation capability in terms of resources | 3.8333 | .92355         |
| Lack of government commitment  | 3.7778 | 1.00326        |
| The lead organization lacks the appropriate political support            | 3.7778 | 1.11437        |
| Lack of clearly defined goals and objectives                             | 3.6667 | 1.13759        |
| Lack of key stakeholders from both government and trade                  | 3.6111 | 1.19503        |

Source: Research Data (2018)

Based on the difficulties encountered by Bulk importer pharmaceutical companies in implementation of Kenya tradenet system, it was unveiled that the difficulties influenced implementation to an average mean of 4.075 implying that all the respondents unanimously agreed that their firms encountered the challenges. Respondents agreed that Kenya tradenet system implementation was affected by 70% of the challenges. Incompatibility of the design system with the real ICT capacities of the country (4.4), Lack of a strong, resourceful and empowered lead organization that oversees the project (4.38) and Lack of continuous training in the implementation of the system (4.3) constituted majority of challenges which was agreed to affect implementation of Kenya tradenet system.

On the other hand, Lack of key stakeholders from both government and trade (3.61) and lack of clearly defined goals and objectives (3.66) had least effect of implementation of Kenya tradenet system because most of the respondents neither agreed nor disagreed that their firms had encountered such challenges. The findings correspond with the findings of the study done by Abeywickrama and Wickramaarachchi (2015) on the Challenges of implementing single window concept to facilitate trade in Sri Lanka: A Freight forwarder perspective. Their study concluded that the most critical challenges of which the mean is above 4.0 are Lack of government support (4.2), Inadequate coordination between Sri Lanka customs, other regulatory institutions and the trade community(4.13) and Organization and human resistance to change(4). The top two critical challenges are strategic level challenges, which require government and top management attention. Additionally on challenges, the findings of Tom (2016) found that the top management

should be directly involved in the change management process so that they can direct the employees on how to implement the change.

#### **4.4 Best Practices and Operational Performance**

The table below represents the findings of the respondents on the extent to which they agree that the best practices affects operational performance.

**Table 4.2 Best Practice Distribution** 

| Best Practice  | Mean   | Std. Deviation |
|--|--------|----------------|
|  |        |                |
| Strong lead agency                                       | 4.2222 | .64676         |
| Establishment of clear project boundaries and objectives | 4.2222 | .73208         |
| Partnership between government and trade                 | 4.0000 | 1.02899        |
| Political Will   | 3.9444 | 1.05564        |
| User friendliness and accessibility                      | 3.7222 | 1.27443        |

Source: Research Data (2018)

The findings indicated that Strong lead Agency and establishment of clear project boundaries and objectives had a mean of 4.22, Partnership between government and trade had a mean of 4.00. Political Will had a mean of 3.94 and User friendliness and accessibility with mean of 3.72. This finding indicates that Strong lead Agency and the development of effective boundaries of projects implemented, objectives as well as Partnership between government and trade was agreed by respondents to have higher impact on operational performance of bulk importer pharmaceutical companies in Nairobi. From these findings it was concluded that all the best practices except political will and user friendliness and accessibility which respondents neither agreed nor

disagreed had influence operational performance of bulk importer pharmaceutical companies in Nairobi. There was no previous study done to find out the Kenya Tradenet systems best practices adopted by pharmaceutical firms but other relating studies such as that of Tinega (2016) alludes that the strategic change systems has been greatly adopted among trade network agency and has influenced the firms performance in positive ways such that it has made the firm to be more competitive that before, increasing the productivity of the firm which has triggered improved market share thus increasing the profits.

On whether a relationship existed between Kenya Tradenet system and operational performance, Regression investigation was applied in determining whether a connection existed between dependent and independent variable, and in determining the magnitude of the connection amongst the study objectives which are the study variables. The model is presented as follows;

**Table 4.3 Model Summary** 

| Model | R     | R Square | Adjusted R Square | Std. Erro | or of | the |
|-------|-------|----------|-------------------|-----------|-------|-----|
|       |       |          |                   | Estimate  |       |     |
| 1     | .803ª | .645     | .497              | .36477    |       |     |

a. Predictors: (Constant), Strong lead agency, User friendliness and accessibility, Partnership between government and trade, Establishment of clear project boundaries and objectives, Political will

Based on Table 4.3, all the study independent variables had a strength of 64.5% against operational performance since the R<sup>2</sup> implying that the five independent variables contribute 64.5% to the operational performance to pharmaceutical firms. The findings correspond with study done by Odhiambo (2008) which pointed out that that Standard Chartered Firm (Kenya) Limited bank has been able to successfully introduce various innovative strategies ranging from product, technological to customer care thus contributing enormously to its profitability over the years.

**Table 4.4 Analysis of Variance** 

| Model      | Sum of  | DF | Mean of | F     | Sig               |
|------------|---------|----|---------|-------|-------------------|
|            | Squares |    | Squares |       |                   |
| Regression | 2.903   | 5  | .581    | 4.364 | .017 <sup>b</sup> |
| Residual   | 1.597   | 12 | .133    |       |                   |
| Total      | 4.500   | 17 |         |       |                   |

Source: Research Data (2018)

- a. Dependent Variable: Operational performance
- b. Predictors: (Constant), Strong lead agency, User friendliness and accessibility,
   Partnership between government and trade, Establishment of clear project
   boundaries and objectives, Political will

The analysis of variance shows whether or not a model is a good fit for the data and the table 4.4 shows an F of 4.364 plus significance level of 0.017. From the table above, the p values results are less than the critical threshold (p<0.05) an indication that that the

influence of Kenya tradenets systems is statistically significant on operational performance of pharmaceutical firms at 95% confidence level.

The numerator for  $\alpha$  =5% whose degree of freedom (df) =(5,12) and critical F value is (3.106). The findings above show that the calculated F value is (4.364) which is greater than the F-critical (3.006), which reveals that the model can be used in predicting the impact of the independent variables on the dependent variable. Additionally, the p-value (0.017) is less than the significance level (0.05), showing that the model is a good fit for the data.

**Table 4.5 Regression Coefficients** 

| Model  |                    |       |      |      | Sig. |
|--|--------------------|-------|------|------|------|
|  | B Std. Be<br>Error |       | Beta |      |      |
| (Constant)   | .512               | 1.404 |      | 365  | .722 |
| Partnership between government and trade                 | .044               | .287  | .042 | .154 | .880 |
| User friendliness and accessibility                      | .395               | .194  | .514 | 2.03 | .064 |
| Political will   | .390               | .311  | .387 | 1.25 | .235 |
| Establishment of clear project boundaries and objectives | .204               | .170  | .245 | 1.20 | .253 |
| Strong lead agency                                       | .100               | .149  | .125 | .668 | .517 |

Source: Research Data (2018)

a. Dependent Variable: Operational performance

According to the table 4.5 above, the equation  $(Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \xi)$  becomes:

#### $Y = 0.512 + 0.042 X_1 + 0.514 X_2 + 0.387 X_3 + 0.245 X_4 + 0.125 X_5$

The study intercept ( $B_o$ ) indicates operational performance when all others factors are held at ceteri paribus zero which is 0.512 implying that when pharmaceutical firms withdraw from using their existing best practices, then the current level of performance will be 51.2%. The adoption partnership between government and trade, user friendliness and accessibility, Political will, Establishment of clear project boundaries and objectives and strong lead agency best practices will result in an increase of pharmaceutical firms performance by 4.2%, 51.4%, 38.7%, 24.5% and 12.5% respectively.

Thus, the outcomes indicate that the most prevailing best practices affecting operational performance of pharmaceutical firms in a bigger way is user friendliness and accessibility as well as political will and establishment of clear project boundaries and objectives. On the other hand, adoption partnership between government and trade and having strong lead agency was found to have least effect on operational performance of pharmaceutical firms with 4.2 and 12.5% respectively. From the literature, Kiraka, Kobia, & Katwalo, (2013) established that process; product, positioning and paradigm types of innovation had a positive performance relationship in some business types of the micro and small enterprises.

#### **4.5 Operational Performance Indicators**

Based on performance indicators, respondents were further asked to show the effect of Kenya tradenet system on operation performance using key performance indicators. The table below presents the findings:

**Table 4.6. Descriptive Statistics for Performance Indicators** 

| Performance Indicators          | Mean   | Std. Deviation |
|---------------------------------|--------|----------------|
| Productivity                    | 4.3333 | .59409         |
| Responsiveness                  | 4.2778 | .75190         |
| Flexibility                     | 4.2778 | .66911         |
| Efficiency of asset utilization | 4.0556 | 1.05564        |
| Service delivery                | 4.0000 | 1.08465        |
| Cost reduction                  | 4.0000 | 1.08465        |

Source: Research Data (2018)

In regard to the effects of Kenya trade systems on operational performance indicators, the study found out that Kenya tradenets system influence operational performance of bulk importer pharmaceutical firms. Performance indicators had a cumulative mean of 4.15 indicating that all the respondents agreed that indeed through mention performance indicators, Kenya tradenets systems had influence on operational performance of pharmaceutical firms. Best practices adopted highly affected productivity (4.3), responsiveness (4.27), flexibility (4.27), Efficiency of asset utilization (4.05) and cost reduction and service delivery least affected by Kenya tradenet systems by mean of (4.0). Therefore from the study findings, it is quite clear that Kenya tradenets systems adopted

by a given firm has connection on its operational performance which can be measured by looking at the indicators of operational performance such as productivity, responsiveness and flexibility or cost implications.

On operational performance indicators, respondents were further asked to rate operational performance indicators behaviour before and after implementing Kenya tradenet system.

The findings is as shown on table 4.7 below

**Table 4.7 Performance Indicators Descriptive Statistics** 

| Performance Indicators          | Mean   | Std. Deviation |  |
|---------------------------------|--------|----------------|--|
| Flexibility                     | 4.3889 | .60768         |  |
| Productivity                    | 4.2778 | .82644         |  |
| Service delivery                | 4.1111 | .58298         |  |
| Responsiveness                  | 4.0000 | 1.08465        |  |
| Efficiency of asset utilization | 3.7778 | 1.26284        |  |
| Cost reduction                  | 3.6667 | 1.23669        |  |

Source: Research Data (2018)

The findings on table 4.6 above clearly indicates that Kenya tradenet system had positive influence on operational performance of pharmaceutical firms since all the variables improved after implementation of the tradenet systems with flexibility having a mean of (4.38),productivity(4.27),service delivery(4.11),responsiveness(4.00), Efficiency of asset utilization(3.77) and cost reduction with mean of (3.67) respectively. The findings of the study corresponds with that of Kiiyuru (2014) who established that the commercial

banks in Kenya had employed value creation through resource availability, customer satisfaction, retention and pricing in form of market innovation strategies to enhance their financial performance.

#### CHAPTER FIVE: SUMMARY, CONCLUSION AND

#### RECOMMENDATIONS

#### 5.1 Introduction

The chapter concentrates on summarizing the findings, the conclusions and the recommendations objectively. The aim of this research was to determine the challenges of implementing Kenya tradenets systems among bulk importer pharmaceutical companies in Nairobi and to establish the effect of Kenya tradenets systems on operational performance of bulk importer pharmaceutical companies in Nairobi.

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

A total of 23 questionnaires were administered to respondents to provide information on challenges of Kenya tradenets systems implementation as well as their effects on operational performance of pharmaceutical firms .Out of 23 questionnaires that were administered, 18 were completed an indication of 78% response rate. The biographic information indicated that majority of the respondents (44.4%) were from middle level management followed by those in lower level management (38.9) and lastly from senior level management constituting 16.7% of the respondents indicating that organizations was well represented in all levels.

Besides, the study further established that 38.9% of the respondents had a work experience between 5-10 years, 33.3% of the respondents had work experience of above 10 years and lastly 27.8% of the respondents had work experience of below 5 years. The findings indicated that the majority of respondents have worked with pharmaceuticals firms for a period of between 5-10 years and had adverse experience in the field and had

knowledge on the data sough on Kenya tradenet systems and their impact of operational performance.

# **5.2.1** Challenges Faced by Bulk Importer Pharmaceutical Companies in Implementation of Kenya Tradenet System

In regard to the challenges faced by Bulk importer pharmaceutical companies in implementation of Kenya tradenet system, it was discovered that the challenges influenced implementation to an average mean of 4.075 implying that all the respondents unanimously agreed that their firms encountered the challenges. Respondents agreed that Kenya tradenet system implementation was affected by 70% of the challenges. In regard to extent to which independent variables affected operational performance, findings indicated that strong lead Agency and development of fundamental boundaries that guides the projects, clear objectives as well as Partnership between government and trade was agreed by respondents to have higher impact on operational performance of pharmaceutical firms in Kenya. However, political will and user friendliness and accessibility were neither agreed nor disagreed by respondents to have influence operational performance of bulk importer pharmaceutical firms in Nairobi.

#### **5.2.2** Kenya Tradenets Systems and Operational Performance

One of the objectives of the study was to find out the existing connection between firm best practice and operational performance of pharmaceutical firms. On whether a relationship existed between Kenya tradenets system and operational performance, positive relationship was revealed from the findings and therefore independent variables that were studied explained 64.5% of the operational performance which is confirmed by  $R^2$ .

The analysis of variance indicated an F static value as 4.364 and a significant change of 0.017. The p values are less than the critical value (p<0.05) implying that the influence of Kenya tradenets systems is statistically significant on operational performance of bulk importers pharmaceutical firms in Nairobi at 95% confidence level. The findings above show that the calculated F value is (4.364) which are greater than the F-critical (3.006), meaning that the model can be used in predicting the influence of the independent variables on the dependent variable. Additionally, the p-value (0.017) is less than the significance level (0.05), which shows that the model is a good fit for the data.

From regression coefficients, the adoption partnership between government and trade, user friendliness and accessibility, Political will, Establishment of clear project boundaries and objectives and strong lead agency best practices will result in an increase of pharmaceutical firms performance by their respective percentages. Findings suggest that the most prevailing best practices affecting operational performance of pharmaceutical firms in a bigger way is user friendliness and accessibility as well as political will and establishment of clear project boundaries and objectives. On the other hand, adoption partnership between government and trade and having strong lead agency was found to have least effect on operational performance of pharmaceutical firms with 4.2 and 12.5% respectively.

#### **5.2.3 Operational Performance**

In regard to the effects of operational performance by Kenya tradenets systems adopted by pharmaceutical firms, the study found out that Kenya tradenets system influence operational performance of bulk importer pharmaceutical firms in Nairobi. Performance indicators had a cumulative mean of 4.15 indicating that all the respondents agreed that

indeed through mention performance indicators, Kenya tradenets systems had influence on operational performance of pharmaceutical firms. Additionally, from the findings, it is quite clear that Kenya tradenets systems adopted by a given firm has connection on its operational performance which can be measured by looking at the indicators of operational performance such as productivity, responsiveness and flexibility or cost implications. The findings on table 4.6 above clearly indicates that Kenya tradenet system had positive influence on operational performance of pharmaceutical firms since all the variables improved after implementation of the Kenya tradenet systems.

#### **5.3 Conclusion**

In conclusion, understanding of Kenya tradenets systems and operational performance is critical to any pharmaceutical firms because such firms works in a very competitive and dynamic environments which requires consistent adjustments as per changes in both internal and external environments .Managements of manufacturing firms needs to come up with long-term strategic plan and objectives for the firm to work towards its failure to which firm will be rendered unresponsive by customers. One of the ways to remain sustainable in such environments is by ensuring their exist solid strategies to drive organizations vision .such strategies includes partnering between government and trade, user friendliness and accessibility ,political will, having strong lead agency and lastly establishment of clear project boundaries and objectives .

From the findings, it is quite clear that pharmaceutical firms has adopted above strategies and other firms are advised to follow the same path for them to remain competitive, increase sales and enhance their operation performance .Additionally, positive correlation between variables (Kenya tradenets and operational performance) was observed hence

pharmaceutical firms should continuously strive to come up with new practices which will be capable of driving up or boosting their sales and operational performance. The findings further suggest that the most the findings suggest that the most prevailing best practices affecting operational performance of pharmaceutical firms in a bigger way is user friendliness and accessibility as well as political will and establishment of clear project boundaries and objectives. From the study findings, it is quite clear that Kenya tradenets systems adopted by a given firm has affiliation on its operational performance which can be measured by looking at the indicators of operational performance such as responsiveness, flexibility and productivity or cost reduction.

#### **5.4 Recommendations**

From these study findings, it was established that pharmaceutical firms had adopted independent variables (tradenets systems) despite numerous challenges faced as agreed by respondents. However much has to be done to ensure that Kenya tradenets systems are implemented smoothly without interference of any challenge even if it means setting aside additional resources for the same .This is crucial to pharmaceutical firms in the sense that by fully incorporating said best practice into their system, their operational performance and competiveness will drastically rise up. The study recommends that pharmaceutical firm's employees should be trained further on the various aspects of tradenets systems and the need for the same towards boosting overall firm operational performance of their firms. In addition, senior managers at bulk importer pharmaceutical firms should lead all these trainings to ensure that there is cutting of costs, responsiveness, flexibility and productivity through adoption of relevant practices. Pharmaceutical firms should therefore invest resources on training of employees so as to

further boost their operational performance through implementation of various tradenet management strategies.

#### 5.5 Limitations of the Study

The research results were applying to the pharmaceutical set up, specifically dealing with bulk importation in Nairobi Kenya. Thus, the results can't be applied to represent all other without considering all pharmaceutical companies in Kenya. An inadequate resource like finances was a challenge. Similarly, time was constrained. Reluctance of some respondents in giving out information on the study was also a challenge in the study due to the rules and regulations of their firm however the researcher communication to the respondents that the study was to be used for study purposes only. Some of the respondents had very tight working schedules hence not present for filling questionnaire.

#### **5.6 Suggestions for Further Research**

The researcher was seeking to establish the challenges faced as well as the effects of Kenya tradenets systems on operational performance of bulk importer pharmaceutical companies in Nairobi. Further studies need to be carried out on other sectors other than bulk importer pharmaceutical firms in Narobi. In addition, future studies should consider other best practices with an aim of establishing their effect on organizational of financial performance. This therefore means that different organizations should be considered in future studies for test their hypothesis.

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#### **APPENDICES**

#### **Appendix I: Questionnaire**

This questionnaire has been designed to collect information on the impact of Kenya Tradenet system on operational performance of bulk importers pharmaceutical firms in Nairobi. Please read carefully and answer the questions as honestly as possible. The information gathered will be used purely for the purpose of academic research and will be treated with utmost confidence.

#### **Instructions**

- 1. Tick appropriately in the box or fill in the space provided.
- 2. Feel free to give further relevant information to the research.

#### PART A: BIOGRAPHIC INFORMATION

| 1. The name of your organization                     |
|--|
|  |
| 2. Your management level in the organization         |
| Senior Level Management                              |
| Middle Level Management                              |
| Lower Level Management                               |
| 3. How long have you worked with the organization?   |
| Below 5 years  |
| 5 to 10 years  |
| Above 10 years                                       |
| 4. Which department do you work in the organization? |

# PART B: CHALLENGES OF IMPLEMENTING KENYA TRADENET SYSTEM AMONG BULK IMPORTER PHARMACEUTICAL COMPANIES IN NAIROBI

a. To what extent has your firm encountered the following challenges in the implementation of Kenya Tradenet system? Use 1 strongly disagree, 2 Disagree, 3 neither agree nor disagree, 4 agree, 5 strongly agree

#### Partnership between Government and Trade

| Component   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
|   |   |   |   |   |   |
| Lack of participation from relevant public and    |   |   |   |   |   |
| private sector agencies in the development of the |   |   |   |   |   |
| system  |   |   |   |   |   |
|   |   |   |   |   |   |
| Lack of government commitment in the              |   |   |   |   |   |
| implementation of the system                      |   |   |   |   |   |
| Lack of traders commitment in the                 |   |   |   |   |   |
| implementation of the system                      |   |   |   |   |   |

#### **User Friendliness and Accessibility**

| Component  | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| Lack of comprehensive operating instructions and guidelines for users            |   |   |   |   |   |
| Inefficiencies with the help desk and user support services                      |   |   |   |   |   |
| Lack of continuous training in the implementation of the system                  |   |   |   |   |   |
| Incompatibility of the design system with the real ICT capacities of the country |   |   |   |   |   |

### **Establishment of Clear Project Boundaries and Objectives**

| Component  | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| Lack of clearly defined goals and objectives   |   |   |   |   |   |
| Lack of careful analysis of the needs, aspirations and resources of the key stakeholders in development of the goals                     |   |   |   |   |   |
| Having goals that are not based on a careful analysis of current approaches to the submission of trade-related information to government |   |   |   |   |   |
| Lack of key stakeholders from both government and trade in developing the goals  |   |   |   |   |   |

#### **Political Will**

| 1 | 2 | 3   | 4 | 5 |
|---|---|-----|---|---|
|   |   |     |   |   |
|   |   |     |   |   |
|   |   |     |   |   |
|   |   |     |   |   |
|   |   |     |   |   |
|   |   |     |   |   |
|   |   |     |   |   |
|   |   |     |   |   |
|   |   |     |   |   |
|   |   |     |   |   |
|   |   |     |   |   |
|   | 1 | 1 2 |   |   |

#### **Strong Lead Agency**

| Component   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Lack of a strong, resourceful and empowered       |   |   |   |   |   |
| lead organization that oversees the project       |   |   |   |   |   |
| The lead organization lacks the appropriate       |   |   |   |   |   |
| political support                                 |   |   |   |   |   |
| The lead organization lacks the appropriate legal |   |   |   |   |   |
| authority.  |   |   |   |   |   |
| The lead organization lacks adequate human and    |   |   |   |   |   |
| financial resources                               |   |   |   |   |   |
| The lead organization lacks appropriate links     |   |   |   |   |   |
| with the business community                       |   |   |   |   |   |

| b. | ist other challenges faced in the implementation of Kenya tradenet system |  |
|----|---|--|
|    |   |  |
|    |   |  |
|    |   |  |

# PART C: KENYA TRADENET SYSTEM AND OPERATIONAL PERFORMANCE

a) Below are some operational performance indicators, indicate using a tick ( $\sqrt{}$ ) to what extent do you agree that Kenya Tradenet system has influenced operational performance of bulk importer pharmaceutical companies in Nairobi

pharmaceutical firms in Kenya. Rate using a scale of 1-5, where: 1 strongly disagree, 2 Disagree, 3 neither agree nor disagree, 4 agree, 5 strongly agree

| Performance                     | Strongly | Agree | Neutral | Disagree | Strongly |
|---------------------------------|----------|-------|---------|----------|----------|
| Indicator                       | agree    |       |         |          | Disagree |
| Cost reduction                  |          |       |         |          |          |
| Responsiveness                  |          |       |         |          |          |
| Flexibility                     |          |       |         |          |          |
| Service delivery                |          |       |         |          |          |
| Productivity                    |          |       |         |          |          |
| Efficiency of asset utilization |          |       |         |          |          |
| Other (specify)                 |          |       |         |          |          |

b) In your own opinion how would you rate operational performance indicators below before and after implementing the Kenya Tradenet system?

| Performance    | Greatly  | Improved | Constant | Reduced | Greatly |
|----------------|----------|----------|----------|---------|---------|
| Indicator      | improved |          |          |         | reduced |
|                | 5        | 4        | 3        | 2       | 1       |
| Cost reduction |          |          |          |         |         |
| Responsiveness |          |          |          |         |         |
| Flexibility    |          |          |          |         |         |

| Performance       | Greatly  | Improved | Constant | Reduced | Greatly |
|-------------------|----------|----------|----------|---------|---------|
| Indicator         | improved |          |          |         | reduced |
| Service delivery  |          |          |          |         |         |
| Productivity      |          |          |          |         |         |
| Asset utilization |          |          |          |         |         |

PART C: KENYA TRADENET SYSTEM AND OPERATIONAL PERFORMANCE

Below are some Kenya TradeNet System Best Practices, indicate using a tick ( $\sqrt{}$ ) to what extent do you agree that the best practices have influenced operational performance of bulk importer pharmaceutical companies in Nairobi. Rate using a scale of 1-5, where: 1 strongly disagree, 2 Disagree, 3 neither agree nor disagree, 4 agree, 5 strongly agree

| Best Practice  | Strongly | Agree | Neutral | Disagree | Strongly |
|--|----------|-------|---------|----------|----------|
|  | agree    |       |         |          | Disagree |
| Partnership between government and trade                 |          |       |         |          |          |
| User friendliness and accessibility                      |          |       |         |          |          |
| Political will   |          |       |         |          |          |
| Establishment of clear project boundaries and objectives |          |       |         |          |          |
| Strong lead agency                                       |          |       |         |          |          |

Thank you for your co-operation

#### **APPENDIX 2: List of Bulk Importers Pharmaceutical Companies in Nairobi**

- 1. Sai Pharmaceuticals Ltd
- 2. Harleys Limited
- 3. Dawa Limited
- 4. Surgipharm Limited
- 5. Cosmos Pharmaceuticals
- 6. Phillips Pharmaceuticals
- 7. Goodman Agencies Ltd
- 8. Sphinx Pharmaceuticals Ltd
- 9. Pharma Specialities Ltd
- 10. Metro Pharmaceuticals Ltd
- 11. Laboratory & Allied Ltd
- 12. Laborex Kenya Ltd
- 13. Crown Healthcare Ltd
- 14. Beta Healthcare International Ltd
- 15. Kenya Medical Supplies Authority (KEMSA)
- 16. Glaxosmithkline Pharmaceutical Kenya Ltd
- 17. Pharmaceutical Manufacturing Co. (K) Ltd
- 18. Phillips Healthcare Technologies Ltd
- 19. Sun Pharma
- 20. Pan Pharmaceuticals
- 21. Mac Naughton Ltd
- 22. United Pharma (K) Ltd
- 23. Ripple Pharmaceuticals Ltd