**EFFECTS OF ELECTRONIC PROCUREMENT ON PERFORMANCE OF INTERNATIONAL ORGANIZATIONS IN SOUTH SUDAN**



**AFRICA INSTITUTE FOR PROJECT MANAGEMENT STUDIES**

**DEPARTMENT OF PROCUREMENTAND SUPPLY CHAIN**

**CASE STUDY: SAMARITAN PURSE INTERNATIONAL ORGANIZATION**

**GOK STATE, SOUTH SUDAN**

**A DISSERTATION SUBMITTED TO AFRICA INSTITUTE FOR PROJECT MANAGEMENT STUDIES IN PARTIAL FULFILLMENT AS A REQUIREMENT FOR THE AWARD OF DIPLOMA IN PROCUREMENT AND SUPPLY CHAIN MANAGEMENT**

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**YEAR 2019-2020**

**DECLARATION**

I declare that this research dissertation is my work and has not been presented to any University for any academic award. And that all sources of information used in this dissertation are acknowledged as complete references.

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**APPROVAL**

This dissertation has been submitted for examination with the approval of my supervisor;

Supervisor Name: Signature: Date:

……………………………… …………....................... ………...........

**DEDICATION**

I dedicate this research work to my beloved parents, brothers and sisters not forgetting my faithful wife and children. Without their help, I would have not reached to this far. God bless them all.

**ACKNOWLEDGEMENT**

This dissertation is dedicated to the Almighty God in the first place because of his Holy Power in protecting me to reach this end. Secondly, to my most cooperative and supportive supervisor, **Prof. Ratemo** who had tirelessly helped me in the completion of this dissertation. Thirdly, to the Administration of **Africa Institute for Project Management Studies (AIPMS)**. Fourthly, to the Administration of Samaritan Purse International Organization in supporting me during my period of Data Collection not forgetting all my beloved work mates and the college mates respectively. And finally to my Family members, friends, and relatives.

**LIST OF ABBREVIATIONS AND ACRONYMS**

**E-procurement** - Electronic Procurement

**ICT** - Information and Communication Technology

**DHL** - Dalsey Hillblom Lynn

**FedExp** - Federal Express

**EXP Logistics** - Express logistics

**NGO** - Nongovernmental Organization

**NNGO** - National Nongovernmental Organization

**EDI** - Electronic Data Interchange

**MRO** - Maintenance Resource Operation

**ERP** - Enterprise Resource planning

**OECD** - Organization for Economic Cooperation and Development

**UNCTAD** - United Nations Conference on Trade and Development

**IT** - Information technology

**LDO** - Locally Developed Organizations

**USA** - United States of America

**UK** - United Kingdom

**SSDNGO Forum** - South Sudan Nongovernmental Organizations Forum

**SPSS** - Statistical Package for Social Science

**GDP** - Gross Domestic Produce

**AIPMS** - Africa Institute for Project management Studies

**PDA** - Personal Digital Assistant

**HR** - Human Resource

**E-Invoice** - Electronic Invoice

**JPEG** - Joint Photographic Experts Group

**TIF** - Tagged Image File Format

**XML** - Extensible Markup Language

**PDF** - Portable Document Format

**E-mail** - Electronic Mail

**EDIFACT** - Electronic Data Interchange for Administration, Commerce and Transport

**ABSTRACT**

The purpose of this study is to find out the impact of e-procurement in South Sudan and on today’s business aspects and job creation. E-procurement is growing at a rapid pace across the world with the penetration of smart phones and internet across the different levels of society across the world. The growth and its gains are already visible from the studies in developed countries, but with the business going to developing and underdeveloped nations, we will be witnessing greater positive results going forward. E-procurement opens a channel of global business, which will witness incremental business in days to come. With the impact of globalization and relaxation in export and import between nations, economies across the world will witness better knowledge and information technology growth and innovations. In addition to the above e-procurement will play an important role in way marketing is done and job markets.

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**CHAPTER ONE**

**1.0 Introduction**

This chapter one discusses the effects of electronic procurement on performance of an organization after the researcher had identified and examined the advantages and disadvantages of electronic procurement. This chapter gives a general overview of the study along with the background information, statement of the problem, objectives of the study, research questions, purpose of the study, significance of the study and scope of the study.

**1.1 Background**

Electronic Procurement or e-procurement, the exchange of goods and services by means of the internet or other computer networks. E-procurement follows the same basic principles as traditional procurement that is, buyers and sellers come together to exchange goods for money. But rather than conducting business in the traditional way in stores and other buildings or through mail order catalogs and telephone operators, in e-procurement buyers and sellers transact business over networked computers (Roman, 2012).

E-procurement offers buyers convenience, they can visit the World Wide Web sites of multiple vendors 24 hours a day and seven days a week to compare prices and make purchases, without having to leave their homes or offices. In some cases, consumers can immediately obtain a product or service, such as an electronic book, a music file, or computer software, by downloading it over the internet (Mwangi, 2013).

For sellers, e-procurement offers a way to cut costs and expand their markets. They do not need to build, staff, or maintain a store or print and distribute mail order catalogs. Automated order tracking and billing systems cut additional labour costs and if the product or service can be downloaded, e-procurement firms have no distribution costs. Because they sell over the Global internet, sellers have the potential to market their products or services globally and are not limited by the physical location of a store (Grandon & Pearson, 2014). Internet technologies also permit sellers to track the interests and preferences of their customers with the customer’s permission and then use this information to build an ongoing relationship with the customer by customizing products and services to meet the customer’s needs (Musau, 2015).

The benefits of e-procurement have been verified by many leading organizations worldwide, and e-procurement is a significant tactic in most organization’s e-business strategies (Mwangi, 2013). The consensus is that e-procurement benefits organizations with respect to procurement cost and process efficiency associated with procurement activities (Heijboer, 2013). This web-based e-procurement solutions can support four major business-to-business tasks in organizations, search as, processing, monitoring and control, and coordination (Subramanian and Shaw, 2012).

E-procurement has exploded as a management’s major concern over the last years, since with the exploitation of new information and communication technologies (ICT) and in particular of Internet the potential to revolutionize, streamline and enhance operations has flourished. Specifically, e-procurement has been identified as an important element of e-business operational excellence for large organizations (Boudijilda, & Pannetto, 2013). E-procurement include; software purchase, daily business auctions, market exchanges and purchasing consortia that aim to automate workflows, consolidate and leverage organizational spending power and identify new sourcing opportunities online (Kamel. (2014).

E-procurement’s benefits include: lower administration costs, inventories and purchasing prices; shorter order-cycle time; enhanced cooperation with suppliers, performance and multi-chain operations (Achuora, 2012).

Although these advantages may suggest a rapid migration from traditional to e-based procurement models, some organizations are slow in adopting e-procurement. However, prior studies on e-procurement have primarily focused on the evaluation of its benefits (Grandon & Pearson, 2014), or its adoption in specific industries, mainly in NGOs (Momade, 2013). Moreover, although the ICT and internet adoption has been extensively examined in hospitality (Mohammadi, 2013) research investigating the level and factors impacting on the adoption and use of specific e-procurement ICT organizations has been minimal.

**1.3 Statement of the problem**

E-procurement has become the key to valuable data for better more intelligent management, particularly for the future. This includes big chains and small family run businesses alike. The on-line procurement sites not only provide the mechanics too quickly and effectively link businesses and suppliers, but they also present data analysis. This is the future potential of e-procurement and to obtain the benefits of this technology, organizations need to make this part of their strategic planning. In South Sudan, e-procurement has important economic and technological implications especially in the organizations. Ensuring that the process is economical and efficient is crucial in organization’s planning. This requires in part that the whole process is well understood by all the stakeholders including the management of the organizations, the procuring entities, the business community, professional associations, academic entities and the general public. Most international organizations in the developing countries like South Sudan, do procure their items online and delivered to their destination via the German carriers DHL and other international competitors such as J.B. Hunt Transport, United Parcel Service, FedExp and EXP Logistics. This study therefore shall be investigating the effects of electronic procurement on the organization’s performance in South Sudan.

**1.4 Objective of the study**

The main objective of the study is to evaluate the effects of e-procurement on organization's (Samaritan Purse) performance in South Sudan.

**The specific objectives are;**

1. To establish the factors that determine the performance of e-procurement on organizations (Samaritan Purse) in South Sudan

2. To find out the standards set to adopt e-procurement by the organizations in South Sudan

3. To determine the challenges facing adoption of e-procurement in South Sudan.

**1.5 Research questions**

1. How frequent does Samaritan Purse use e-procurement?

2. Does Samaritan Purse have clear policies for e-procurement?

3. What is the role of management in the implementation of e-procurement in Samaritan Purse?

**1.6 Purpose of the Study**

The purpose of this study is to investigate the effects of e-procurement on organization’s performance in South Sudan with specific reference to Samaritan Purse as a case study, the research seeks to investigate the various aspects of e-procurement and the role of the available mechanisms to facilitate e-procurement.

**1.7 Significance of the Study**

South Sudan gained its independence at a time the World has attained high level of technology as well a home for more than five-hundred NGOs, National and International with well-established internet connection to facilitate communication and exchange of productions. The study aims to explore the effects of e-procurement in securing fast acquisition of products procured online to combat delay if the traditional procurement was used. The study will provide the stakeholders with fundamentals and benefits of e-procurement in South Sudan.

**1.8 Scope of the study**

The case study shall be Samaritan Purse International, in Gok State. The NGO was chosen because it is one of the biggest international organizations that cannot rely alone on local consignments but also procures as well online too. The organization is accessible within the researcher’s reach and also access to transport is easy. The study will investigate the effects of e-procurement on Samaritan Purse International in South Sudan. To come up with fair finding, the researcher had carried out a pre-test at four NGOs to test the research instrument. The study was conducted at a given time frame, the researcher came up with this valuable material. This research project fills a gap as it is first of this kind to be conducted in South Sudan.

**Conceptual framework**

**Organizational Policy**

* Organizational power
* Organizational culture

**Cost Reduction**

* Profitability
* Increases Productivity

**Innovation**

* Information Technology Infrastructure
* Increases Productivity

**Management Support**

* Competitive Advantage
* Improved Performance

**Adoption of E-procurement**

* Dematerialization
* Disintermediation

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

**Figure 1: Conceptual framework**

**CHAPTER TWO**

**Literature Review**

**2.0 Introduction**

This chapter consists of brief summary of previous studies related to the objectives of the study in South Sudan and in other countries.

**2.1 Literature review**

This review seeks to identify themes in the literature relating to e-procurement, with the aim of illuminating the possible issues influencing e-procurement adoption in the NGOs in South Sudan.

It considers literature on e-procurement and its current use and benefits. In seeking to explain differences in e-procurement adoption between organizations, several factors are identified in the literature, organizational, readiness, supply, strategic and policy factors relating to e-procurement. The literature review then turns to a consideration of the digital divide, a salient contextual factor influencing the adoption of e-procurement in both National and International organizations.

**2.2 E-procurement**

Information and communication technologies are changing the way organizations do business, particularly the adoption of e-procurement. The scope of e-procurement includes information exchange, commercial transactions and knowledge sharing between organizations (Bryman, B. & Bell, 2011), whereas e-procurement focuses only on commercial transactions (David, 2014). Some of the technologies associated with e-procurement include websites, e-mail, extranets, intranets and electronic data interchange (EDI), (Eakin 2014).

Different forms of technology are appropriate for different procurement activities; six forms of e-procurement have been classified (Enporion 2014), including e-ordering/e-Maintenance Repair Operation (MRO), web-based enterprise resource planning (ERP), e-sourcing, e-tendering, e-reverse auctioning/e-auctioning and e-informing.

Other researchers have classified e-procurement into three broad types; transaction management to manage the requisition to payment process, brokerage such as using electronic exchanges and e-auctions and electronic integration which may involve shared information systems in the supply chain, such as EDI or sharing computer aided design systems (Essig & Arnold, 2014). Integration of information across firms within supply chains is a requirement for efficient, responsive operations (Fraser & Robert, 2014) integrated information has been described as the glue that holds supply chains together (Harrison, & Hoak, 2011).

**2.3 Current use of e-procurement**

In the past, there were high expectations of the uptake of e-procurement using internet technologies. The internet is the biggest thing that has happened in the current technology, it is going to become as fundamental to the operations of businesses as the telephone. One won’t be able to be in business without internet.

In spite of the claimed business benefits that can come from embracing e-procurement, the extent of adoption in OECD countries is below expectations and progressing slowly (Mariam Webster 2014). Despite significant recent increases in internet sales in many countries, total business-to-customer plus business to business internet commerce still only represents low percentage of turnover in the developed countries (OECD, 2017).

Information integration in supply chains is not well advanced (Mays Business School, 2014), despite take-up of ERP software (McCrea, B. 2013). Whilst promoted by software vendors as appropriate for all purchases in all types of organization, e-procurement is currently being used mainly to purchase a limited set of goods, predominantly office supplies and MRO supplies (Davila and Palmer, 2013).

**2.4 Potential drivers of difference in adoption of e-procurement**

In seeking to explain differences in e-procurement adoption between organizations, several factors are identified in the literature. Five main types of factor that appear to influence the adoption of e-procurement-organizational, readiness, supply, strategic and policy factors were identified.

**2.4.1 Organizational factors**

The main organizational factors that appear to impact on the likely adoption of e-procurement are size and type of operation. E-procurement is more evident in bigger organizations than smaller. Small organizations often lag behind larger organizations in e-procurement adoption (Michigan State University 2014). Reasons for this include attitude, resource poverty, limited IT infrastructure, limited knowledge and expertise with information systems (Harland et al., 2017). However, e-procurement can be viable for organizations through web-based enterprise cooperation (Berlak and Weber, 2014) or if the small organizations can see the business case for e-adoption (Harland et al., 2017).

Some types of organizational operations seem to lend themselves to e-procurement. The use of e-procurement applications often goes hand-in-hand with repetitive purchases from suppliers, reducing human intervention and paperwork and often resulting in improved performance for buyers and suppliers (Ravi, 2012). Routine and repetition in the procurement system will increase the efficiency in this process and result in a higher level of electronic integration between buyers and suppliers (Turner & Townsend 2014). Make-to-order supply chains differ from make-for-stock supply chains, impacting on implementation of e-procurement (Kraljic, 2014)

High volume operations with substantial logistics, requiring regular tracking of items are more likely to use e-procurement (Turner & Townsend 2014). Operations with high usage of MRO supplies are more likely to use e-procurement (Rajkumar, 2014). The business-to-business e-procurement solution is likely to vary with the number of buyers and suppliers, their connectivity and the purpose of trading (Meyer, 2011).

**2.4.2 Readiness factors**

Organizational readiness and external pressure impact on e-procurement strategy (Alsac, 2017). Many organizations experienced a number of major problems in implementing e-procurement projects, due to hasty decisions in the presence of considerable media and software vendor deception and often no theoretical basis behind the determination of which applications are most appropriate (Kohli, 2012).

To attain the greatest benefits, purchasing processes should be evaluated and improved before adopting e-procurement tools (Shakya, 2017). Internet technologies enable integration with trading partners, yet amplify the need for fundamental organizational change (Power and Singh, 2007). Business-to-business seller competence depends on change disposition (Thomas, 2016).

Lack of readiness has been attributed mainly to human readiness (Musso, 2010). Internal barriers to e-adoption are more significant than customer or supplier barriers (Shakya, 2017), suggesting supply management professionals need to ensure their own organizations are ready for e-adoption (Fitzgerald, 2015).

**2.4.3 Supply factors**

E-procurement is more likely to be beneficial in dispersed supply chains as it helps coordination (Thomas, 2016). Different actors in supply chains have got different power, legitimacy and urgency to implement e-procurement and e-procurement can have an effect on trust in supply chain relationships (Rajkumar, 2014).

Lack of assistance and the structural inertia of large organizations in supply chains can be a disincentive to implement e-procurement (Thomas, 2016). Different industries show different propensities to e-procurement adoption, related to existing use of information exchange infrastructures prior to the advent of the internet (Srivastava, 2016).

The greatest benefits of e-procurement occurs when its application was fully integrated throughout the supply chain (hu, K., Dong, S.T., Xu, S.X. and Kraemer, K.L. 2006). Some literature had pointed to the possibilities of greater integration and collaboration across e-procurement-supported supply chains (Moses, Njihia & Magutu, 2013). E-procurement was more likely to be adopted if it was perceived that suppliers have capability to deal with it; there were difficulties in integrating information systems across firm boundaries in supply chains if suppliers lack capability (Harland, Caldwell, Powell, and Zheng, 2007).

**2.4.4 Strategic factors**

A company might adopt e-technologies as part of its overarching business strategy, contributing to improving firm performance and increasing competitive advantage. The strategic use of e-procurement had been considered in several studies and how e-procurement strategy aligns with the overarching business strategy of a firm. The internet would only become a powerful source of competitive advantage if it was integrated in firms’ overall strategies (Porter, 2001). The role of IT had evolved from a productivity tool to a more strategic level (Gattiker, Huang and Schwarz, 2007). An e-procurement strategy should specify the aims, goals and context of the application (Soliman and Youssef, 2001); these choices should be aligned with other organizational and managerial choices, and integrated with the organization’s processes (Walker, and McBain, 2008). These studies suggest that if organizations were being strategic in their e-procurement adoption, they may have a specific e-procurement strategy and that this will align with broader organizational strategy.

**2.4.5 Policy factors**

E-procurement could be used to support broader organizational policies, both through traditional and e-procurement processes. Electronic procurement in the organizational domain could be seen as a policy tool to support the delivery of organizational procurement policy, improving transparency and efficiency (Khanapuri, Nayak, Soni, Sharma and Soni, 2011). E-Procurement could assist an organization in the way it does business by reducing transaction cost, making better decisions and getting more value (Panayiotou et al., 2004). E-Procurement adoption and usage in the EU and US public sector is being encouraged (Walker and McBain, 2008).

Looking beyond e-procurement policy to organization procurement policy more generally, organization’s public procurement could be used to support societal reforms. Public procurement had been used to promote social outcomes (McCrudden, 2004) and environmental benefits (Walker et al., 2008). This aspect of organization procurement could be operationalized through e-procurement applications. For example, some organization’s sector e-catalogues list eco-labels so that buyers could choose environmentally friendly products (Rosenzweig and Roth, 2007) Some factors that appear to influence the adoption of e-procurement by organizations-organizational, readiness, supply, strategic and policy factors.

**2.5 The digital divide**

The global digital divide had been defined as the differential extent to which rich and poor countries benefit from various forms of information technology (James, 2007).

Business use of the internet had become fairly standard in OECD countries, while in some poor regions the number of internet users had grown substantially, overall the gap between developed and developing countries remains wide (UNCTAD, 2005). The UN Conference on Trade and Development produced a report on e-procurement Development that showed internet access was high among enterprises in developing countries, but that the adoption of e-procurement is low, especially amongst local organizations (Cullen and Webster, 2007). In South Sudan, locally developed organizations (LDO) using the internet, the main barriers to e-procurement were perceived to be lack of network security, development costs, lack of client supplier readiness and slow and unstable connections.

A digital divide exists between those with internet access and capability and those without; this divide may be between organizations, such as National and International Organizations, within Nations, for example between urban and rural communities, or between Nations, such as developed and developing Nations. The level of the divide had been most extreme between highly technologically developed Nations, such as the USA, Japan, the UK and less-developed nations, such as many of the African and Asian Nations. Developing countries in Africa and other regions face a competitive disadvantage because their network had difficulty accessing the internet (Rosenzweig and Roth, 2007).

The digital divide appears to be growing both within and between Nations, reflecting and perpetuating inequalities. The swift emergence of a global information society was changing the way people live, learn, work and relate yet too many of the world’s people remain untouched by this revolution. A digital divide threatens to exacerbate already-wide gaps between rich and poor, within and among countries.

Removing barriers to bridging the digital divide was underlined, particularly those that hinder the full achievement of the economic, social and cultural development of countries and the welfare of their people, in particular, South Sudan.

Certain factors seem to affect internet usage and e-procurement uptake amongst developing countries. Developing countries whose policies promote economic growth and private sector competition had experienced higher internet intensities (Power and Singh, 2007). A country’s degree of development impacts on internet usage and degree of development can be viewed in terms of a country’s status in the world, level of democracy, foreign investment, manufacturing, exports and trade share (Crenshaw and Robison, 2006; Santora, 2006). Factors impacting on the diffusion of e-procurement in developing countries include infrastructure in areas such as IT and telecommunications, commercial, organizational and legal, social and cultural factors, transportation and minimum disposable income (OECD 2007). Trade using e-procurement is a means of improving the economic growth and performance of less-developed nations (Klein, 2007).

The digital divide could be an important contextual factor for considering e-procurement adoption in the organizations. It was important because in less-developed regions that the organizations were trying to support, many suppliers had limited or no internet access and hence are unable to trade using e-procurement technologies. Organizations do business with vendors from all over the world and actively working at increasing its sources of supply from developing countries and countries with economies in transition (UN Procurement Division, 2008). In some organizational Procurement Manual, there was concern that procurement processes such as vendor database registration and evaluation of requests for proposals should not unduly disqualify Vendors from developing countries and countries with economies in transition (UN Procurement Division, 2007). E-procurement adoption across the organizations may run counter to UN policies of supporting less-developed nations, regions and organizations.

The impact of setting e-procurement in this broader digital divide context was that what may be good e-procurement practice in a profit-making firm may be viewed as competing with broader policy objectives of not-for-profit organizations. As the UN had a policy to increase sourcing from developing countries and simultaneously considers e-procurement policies, there was increasing awareness that internet usage and e-procurement was limited for suppliers in some countries. The way the UN was considering e-procurement adoption against the important contextual backcloth of the digital divide was to debate how these competing procurement policy objectives might be aligned and to decide on an agreed policy response.

**CHAPTER THREE**

**Methodology**

**3.0 Introduction**

This chapter presents the methodology that will be used in the study. This has been divided into study population, research design, research population, sample size, sample procedures, research instruments, data gathering procedures, data screening, ethical considerations, data analysis and study limitations on the factors affecting electronic procurement in South Sudan. Case study; Samaritan Purse, Gok State.

**3.1 Research Design**

The study will be based on a cross-sectional design using quantitative and qualitative data collection methods. The research design above is selected because it enables easy understanding of the problem of the study and to conduct the study in a short time possible. The researcher will interview the respondents face-to-face.

**3.2 Research Population**

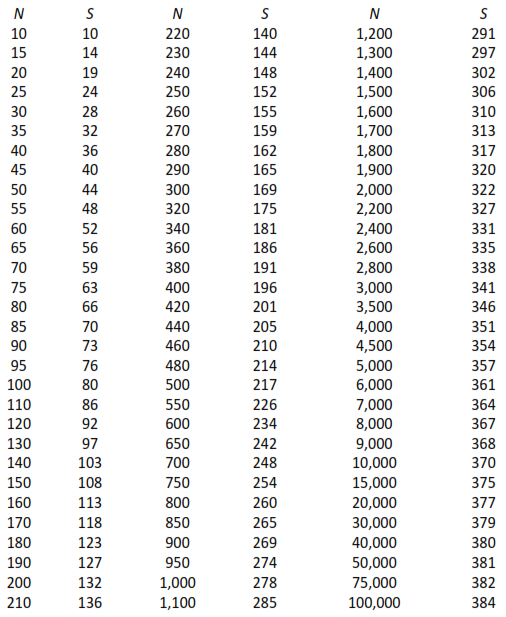
The total number of Samaritan Purse staff in Gok State is approximately 80 (SSD NGO Forum 2016). However due to the civil unrest that had happened in July 2016, the number of the humanitarian organizations staff had become dynamic

**3.3 Sample Size and Procedures**

A sample size was selected from Samaritan Purse in Gok State. From the approximate number of staff, a sample size of 36 respondents were selected randomly from the population size. Random sampling gives wide representation of the population size in the area of study and it also reduces bias in the study.

The study adopted Krejcie and Morgan Sample Determination Method and Table (Krejcie and Morgan, 1970).

The table below showed the Krejcie and Morgan table for sample determination.



**Figure 2: Krejcie and Morgan, 1970.**

The sample size of 36 was obtained using the formula

S = [X2NP(1- P)] ÷ [d2 (N-1) + X2P(1-P)]=(X2NP(1-P)/(d2 (N-1)+X2P(1-P)) ………Equation 1

Where

S = Sample size

X2 = Chi-square for the specified confidence level at 1 degree of freedom = 1.96 x 1.96 = 3.841

N = Population size = 40

P = Population proportion (Assumed to be 0.5 since this will provide the maximum sample size).

d2 = desired Margin of Error (expressed as a proportion) = 0.05 x 0.05 = 0.0025

Substituting for X2, N, P, d2 in the formula yields

S = [1.96x 196 x 40 x 0.5 (1-0.5)] ÷ [0.05 x 0.05 (40-1) + 1.96x 196 x 0.5(1-0.5)] = 38.416÷1.05775

S ≈ 36

Therefore, the sample size to be used in this study will be 36 respondents.

**3.5 Research instrument**

The researcher constructed the questionnaire after purposive objective of the research. The variable that was investigated in the questionnaire were; impacts of e-procurement on the NGOs in South Sudan. The research tool was closed ended questions which allowed respondents expressed their experiences in their own choices. The questionnaires were administered by the researcher, limited time for data collection was 3-5 days. The respondents were first asked to give their time of about 05-10 minutes for the interview and after consent, the interview proceeded.

**3.6 Data Gathering Procedures**

The Researcher used mainly primary data, where survey questions were used for interviewing the respondents. The researcher selected 36 respondents at random from Samaritan Purse International, among the respondents each was given a questionnaire to fill and to those that could be conducted by the researcher. The data that was collected from Samaritan Purse provided a complete picture of the views of other NGOs in South Sudan. Nevertheless, random selection and presentation that was availed to the respondents helped improved the possible generalization which eventually promoted equal chances of population representation. The outcome of the study allowed organizations in planning and answering questions whether or not on how effective is e-procurement to the sustainability of the organizations. What are the effectiveness of e-procurement in organizations? What could be the practical lessons learned from the utilization of e-procurement in the South Sudan?

**3.7 Quality Control**

This was done after data collection from the field. The questionnaires checked one by one to ensure forms that were not answered or left blank were corrected before analysis.

**3.8 Data analysis**

The data was analyzed by descriptive statistical method of facts that the researcher experienced in the field. The data was analyzed by the help of Statistical Package for Social Science (SPSS) that presented the results in graphs that show the frequency and percentages to understand the facts of the result. The chapter on data analysis presented data from respondents in the area of gender, age, marital status, education, occupation among others.

**3.9 Ethical Consideration**

The researcher was very restrictive to the ethical issues in the research. All respondents were assured of the anonymity and the use of information that they would provide. From the introduction, none of them was asked to write his or her name on the questionnaire and the information provided not to be shared with any third party.

**3.10 Limitation of the study**

The sample size of 36 respondents was relatively small hence it had an effect on the outcomes of the study. The analysis was limited to the available information on variable given the nature of the dataset. The whole research project was delayed as a result of inadequate materials for facilitating the research project.

**CHAPTER FOUR**

**Data analysis, presentation and discussion**

**4.1 Introduction**

This chapter takes into account the presentation of the data that has been systematically collected, statistically analyzed and interpreted. In this study, 36 respondents were interviewed. The respondents considered were staff of Samaritan Purse who are had been work for the organization for more than 1-2 years of job experience in various job positions. The data was analyzed using Statistical Package for Social Science (SPSS). The responses obtained are representative of the views of respondents in the study area.

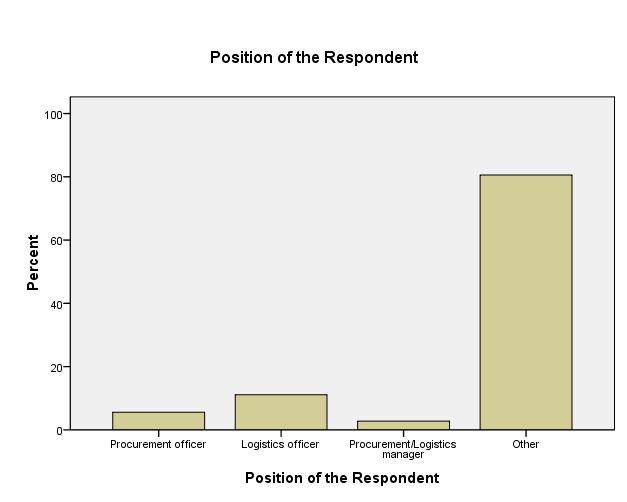
In the fig 4.1 below, the researcher interviewed 83.3 % male respondents and 16.7 % female at Samaritan Purse International.

**Figure 3: Gender of the Respondents**

The fig. 4.2 below shows age group of the respondents in which, 22.2% of the respondents were from 25-30, 61.1% from the age of 30-40, 11.1% were from the age of 35-40 and 5.6% were from the age of 45 and above

**Figure 4: Age group of the respondents**

The fig. 4.3 below shows positions of the respondents in the organization. The researcher interviewed, 5.6 % of the respondents held the positions of procurement officer, 11.1% were logistics officers, 2.8% held management position in procurement/logistic while the majority were from other positions which made the largest 80.6 %.

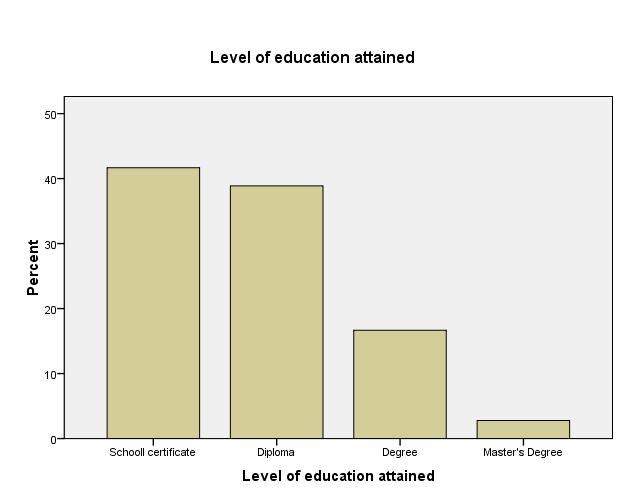


**Figure 5: Position of the respondent**

The fig. 4.4 below shows the qualifications of the respondents in which 44.4 % were professional and 55.6 % of the respondents were secondary school leavers. Most of the 55.6 are still undergoing their studies as undergrounds in universities and other institutions, by two years to come or so, the %age for the professionals shall over weigh the %age of the unprofessional staff.

**Figure 6: Qualification of the respondents**

Fig. 4.5 below shows the qualification of the respondents, school certificate dominates with the highest with 41.7 %, 38.9 % were Diploma holders, 16.7 degree holders and the least were Master’s degree holders which made up 2.8 % of the total.

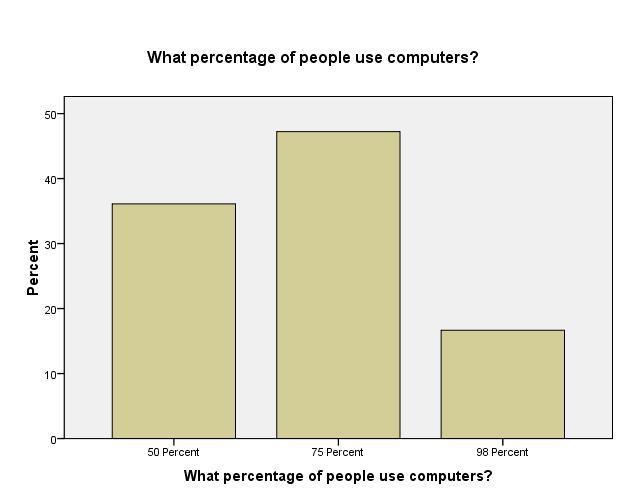


**Figure 7: Educational level of the respondents**

Fig. 5.6 below shows the use of computers by the staff of the organization, in the interviews 97.2 % of the respondents indicated that they use computers while 2.8 % indicated they have no knowledge about the organization using computers.

**Figure 8: Shows computer use in the organization**

Fig. 4.7 below shows the %age of people using computers in the organization. In the findings the researcher found out that 75 % of the staff the majority use computers in their day-to-day office work operations. This has shown clearly how important computers are in the modern era of digital technology, without computers, work cannot move faster as expected. In the old days typing documents were confined to a centralized secretary who do every work but now every staff can do his or her own work thus making work easy.



**Figure 9: Percentage of people using computers**

**Summary and Discussion**

The overall aim of this chapter is to synthesize the findings of the previous chapters. This was first by a summary and discussion of the main findings of the study with respect to each study objective.

In the study the researcher interviewed 36 respondents at Samaritan Purse International. The females constituted the minority of in the study. The respondents who participated in the study were of different age group of which, 22.2% were from the 25-30, 61.1% of the age from 30-35 who turned to be the dominant participants in the study, 11.1% were from the age of 35-40 and 5.6% were from the age of 45 and above, this gave a balanced representation of all age groups in the study. The researcher furthermore recorded, 58.4% of the respondents had high education, 41.7% had secondary education, the total number of the respondents were dominated by high education followed by those who had secondary school certificates. As an international and one of the giant organizations in South Sudan, Samaritan Purse is said to have a high speed and reliable broadband internet service that provide staff with sufficient internet for their access to the various websites, they can browse and acquire many new information as well as subscribing to other sites. The speed of the internet is said to be more than 100mbp, a speed for normal functioning internet. In the interview, 86.1% of the respondents who were the same time the staff of the organization did confess that there were several purchases made by the procurement department. In the process, the researcher found out that 97.2% of the respondents use computers in their daily life, out of the total who were interviewed, only 2.8% were found to be using computers but not so frequent. The respondents who participated in this research held various positions that is, procurement, logistic officers, procurement/logistics manager and others from different positions. Of the people interviewed, 5.6% were procurement officer, 11.1% were holding the positions of logistics officers, 2.8% were either procurement or logistic manager, 80.6% the majority were others who hold various positions. Of the 36 respondents interviewed, the researcher had found out that 41.7% of the respondents hold secondary school certificate, this makes the largest population of the staff, 38.9% Diploma, 16.7% were holders of Bachelor Degrees and 2.8% hold Master’s Degree. As an international organization, internet use is eminent for day to day communication within the work station upto 94.4% of the respondents in agreed that there is internet for the organization, out of this 75% use the internet to transact business, communicate messages within and outside the organization, and this had made high utilization for the internet. However to larger extent, the speed of the internet depend on the bandwidth the organization pays for on monthly bases. The highest speed so far recorded was 100 mbp but a time it proceeds higher than that. The organization has its own website, the website is used for advertising new job positions and also well-wishers to contribute their donations. From the interview perspective, 86.1% of the items for the organization are ordered or bought online while 8.3 % of the items were procured locally within South Sudan. 94.4% of the ICT infrastructure including serves and software were being maintained by the IT staff for the organization, however in some instance where the servers for the organization may require upgrading the system to the latest version of software`, the organization hires external suppliers to do the technical work. Interviewing the respondents, 72.2% did say the organization has its owned ERT and HR software the management uses in their daily activities.

**CHAPTER FIVE**

**Conclusion and Recommendation**

**5.1 Conclusion**

The following results for the conclusion from this article E-Procurement will show tremendous growth in promotion of business in South Sudan, it will wipe out the barriers of boundaries between nations and will be an integral part in GDP contribution. Countries will open up their markets for imports of goods through E-Procurement which will benefit various sections of society in terms of knowledge, skills, technological advancement and improved ways of marketing as well as employment, with the technological growth happening on a daily basis, new advancement and applications are getting introduced every day and the volume of business will show growth. This will lead to a situation where customers start placing orders from the online shops and get products delivered as per ones convenience. Digital marketing is also growing at faster pace where in every origination is moving from traditional marketing to online marketing and it is fast, easy and cost effective. Hence this integration of digital marketing with e-procurement will bring innovations in marketing functions. Job market will see a major shift in the nature of jobs and the need to technological skill set. There will be some reduction in traditional jobs because of E-procurement and digital business and will open a new horizon for jobs in information and communication technology sector. The net result will depend on the skill set of candidates irrespective of the sectors.

E-procurement is still young and growing field of commerce in South Sudan, it has however gain ground rapidly in manufacturing sector in the developed and developing countries although with a much slower adoption in many International and National organizations in South Sudan. With the increasing decline in the financing of organizations in South Sudan however, sustainable methods of cost reduction is at the forefront of many organizations and e-procurement presents itself as the smart solution with the potential to significantly cut overhead costs in organizations. It is therefore highly recommended that organizations adopt e-procurement because of its well-known benefits and potential of increasing growth and efficiency in both International and National Organizations operations.

**5.2 Recommendations**

**Following the results of this study, below are recommendations**.

E-procurement vary from one organization to another although successful implementation of e-procurement will require;

1) Employees and management commitment to success of adoption;

2) Reliability of information technology and supplier performance;

3) Monitoring the performance of e-procurement systems;

4) User acceptance of e-procurement systems and top management.

5) Training of staff in procurement practices and continuous measurement of the key benefits, best practices and actual selection of the system.

6) Most studies in South Sudan are based on general procurement, but no studies have focused on knowledge and practices of e-procurement and its adoption in South Sudan I would therefore recommend that researchers carry more studies on e-procurement, practices and adoption in South Sudan so that best procurement practices and sustainable benefits and easy system be adopted.

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**APPENDIX**

**TENTATIVE TIMETABLE FOR SCHEDULE OF RESEARCH ACTIVITY 2019-2020**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **ACTIVITY** | **OCTOBER** | **NOVEMBER** | **DECEMBER** | **JANUARY** | **FEBUARY** |
| 01 | Identification of Research Topic |  |  |  |  |  |
| 02 | Research Proposal |  |  |  |  |  |
| 03 | Writing Chapters  1, 2, 3 and approval by Supervisor |  |  |  |  |  |
| 04 | Data collection |  |  |  |  |  |
| 05 | Data analysis  and presentation |  |  |  |  |  |
| 06 | Writing chapters 4,5 |  |  |  |  |  |
| 07 | Final research binding and submission |  |  |  |  |  |



**AFRICA INSTITUTE FOR PROJECT MANAGEMENT STUDIES**

**ACADEMIC RESEARCH QUESTIONNAIRE 2019**

I am **Elija Thon Buol**, a final year student from Department of Procurement and Supply Chain Management, undertaking a research on the **Effects of Electronic Procurement on Performance of International Organizations in South Sudan.** **A case study of Samaritan Purse**.

The research is intended to generate information that will be used by the researcher for study purpose only at Africa Institute for Project Management Studies.

I am interested in your honest opinions and encourage you to speak openly about your experiences. This is not a test and there is no right or wrong answer. This discussion will last not more than 10min. I am happy to answer any questions you have about the research now and after the discussion.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| a) | Date of interview |  | | |
| b) | Organization’s name (Optional) | | |  |
| ***Instruction: Tick the answers in all Sections*** | | | | |
| i). | Gender | (a) male (b) female | | |
| ii). | Age | | | (a) 25-30  (b) 30-35  (c) 35-40  (d) 45 and above |
| iii) | Designation | | (a) Procurement Officer (b) Logistics Officer  (c) Procurement / Logistics Manager (d) Other\_\_\_\_\_\_\_\_\_\_\_\_ | |
| vi) | Qualification | | | (a) Professional   1. Amateur |
| v) | Level of Education attained | | | (a) School Certificate (b) Diploma  (c) Degree (d) Master’s Degree |

**Section A – Subsection I-Knowledge of Computer and accessories**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/No** | **Research questions** | **Yes** | **No** | **Don’t know** |
| 6 | Does the organization use computers?  Include: personal computers, nettops, portable computers such as laptops, notebooks, netbooks, tablets and other portable devices such as smartphones and Personal Digital Assistants (PDAs) |  |  |  |
| 7 | What percentage of people in the organization use computers, as defined in question 1, for their work?  Include: Employees, all agency staff on your payroll | **50 %** | **75%** | **98%** |
|  |  |  |
| **Section A: Subsection II - Access and use of the internet** | | | | |
| 8 | Does this organization have internet access? | **Yes** | **No** | **Don’t know** |
|  |  |  |
| 9 | What percentage of people in this organization use computers with internet access for their work? | **50 %** | **75 %** | **90 %** |
|  |  |  |
| 10 | What is the maximum contracted download speed of the fastest fixed internet connection of this organization? | **50mbp** | **100mbp** | **>100mbp** |
|  |  |  |
|  |  | **Yes** | **No** | **Don’t know** |
| 11 | Does this organization have a website, either its own or third party? |  |  |  |
| 12 | Does the organization have on-line ordering or reservation/booking, for example using a shopping cart? |  |  |  |
| 13 | Does this organization use any of the following social media? Social networks, for example Facebook, Linkedin, What’s app organization’s blogs or microblogs, for example Twitter, Presently Multimedia content sharing websites, for example YouTube, Flickr, Picasa |  |  |  |

**Section A-Subsection III - ICT Specialists and Skills**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/No** | **Research questions** | **NGO ICT Staff** | **Mainly external suppliers** | **No**  **idea** |
| 14 | Maintenance of ICT infrastructure, for example servers, computers, printers, networks |  |  |  |
| 15 | Support for office software, for example  word processors, spreadsheets, etc. |  |  |  |
| 16 | Maintenance of ICT infrastructure, for example servers, computers, printers, networks |  |  |  |
| 17 | Support for office software, for example  word processors, spreadsheets, etc |  |  |  |
| 18 | Development of organization’s management software/systems, for example ERP software, HR databases |  |  |  |
| 19 | Development of web solutions, for example websites,  e-procurement solutions |  |  |  |
| 20 | Security and data protection, for example security testing, security software |  |  |  |
| **Section B: E-Invoices and E-Procurement**  *Invoices can be in paper or electronic form. Invoices in electronic form can be of two types: E-invoices in a standard structure suitable for automated processing, for example EDI, XML. These are exchanged either directly or via service operators or via an electronic banking system Invoices in electronic form not suitable for automated processing, for example e-mails, pdf e-mail attachments, images in TIF, JPEG or other format.* | | | | |
| 21 | During 2019, did this organization issue/send any type of invoices in electronic form? | **Yes** | **No** | **I don’t know** |
|  |  |  |
| 22 | If yes, of all invoices this organization issued/sent to suppliers, what percentage were issued/sent as:  E-invoices in a format suitable for automated processing, for example EDI, XML? | **Less than 50%** | **More than 50%** | **More than 75%** |
|  |  |  |
| 23 | Invoices in an electronic format not suitable for automated processing, for example emails, PDF email attachments, images in TIF, JPEG or other formats? Only paper invoices? |  |  |  |
| 24 | Of all invoices this organization received during 2019, what percentage were received as: e-invoices in a format suitable for automated processing, for example EDI, XML? |  |  |  |
| 25 | Paper invoices or invoices in a format not suitable for automated processing, for example emails, PDF email attachments, images in TIF, JPEG or other formats? |  |  |  |
| 26 | During 2019, did this organization receive any orders from suppliers for goods or services via a website or apps? *Include: orders received for utilities, goods, materials and services over a website or via web forms over the internet or an extranet* | **Yes** | **No** | **Don’t know** |
|  |  |  |
| 27 | During 2019, did this organization receive any goods or services from suppliers via EDI type messages (i.e electronic transmission methods which allowed their automated processing, for example internet or non-internet EDI, XML, EDIFACT etc)? |  |  |  |
| 28 | During 2019, did this organization place any orders for goods or services, excluding capital goods, via websites, apps or EDI type messages?  *Include: orders placed for utilities, goods, materials and services over websites or via web forms over the internet or an extranet, other ICTs such as EDI, automated telephone entry*  *Exclude: manually typed email, phone (person to person) and conventional fax enquiries that did not result in placing an order* |  |  |  |
| **In the box below, please add any comments that you would like to make.** | | | | |
|  | | | | |
| ***Thank you for completing this questionnaire.*** | | | | |