

# Analysis of the Relationship between Electronic Procurement and Performance of Manufacturing Firms in Uganda: Empirical Studies from Igara Tea Estate Company Limited in Bushenyi District

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**Abstract:** *The study investigated “the effect of Electronic procurement on organizational performance of manufacturing firms”. The study was guided by three research objectives which were; to examine the effect of E-Data transmission on organisational performance of manufacturing firms in Uganda, to establish the effect of e-billing on organisational performance of manufacturing firms in Uganda, to explore the effect of e-sourcing on organisational performance of Igara tea estates company ltd, Bushenyi district. Igara growers tea factory, Bushenyi has registered declining profits as well as performance for the last five years due to poor electronic methods they employ. The methodology involved a cross sectional survey design was employed in this study. Both qualitative and quantitative approaches to data collection and analysis were employed in order to get an in-depth understanding of the phenomenon under investigation and to confirm completeness for instruments. The target study population of the study was 100 respondents while the sample size was 80 respondents comprising of the staff members and clients of Igara growers tea factory, Bushenyi district. The data collection instruments involved the use of questionnaires and Interviews. Data was presented and interpreted using frequency tables. The findings of the study revealed that; there is a significant positive relationship between the components of e-procurement namely e-data transmission systems, e-billing management and e-sourcing with the organizational performance. The researcher recommended that; Enterprise resources planning (ERP) systems in particular should be concerned with trying to integrate and co-ordinate the various internal functional areas in order to break down those functional boundaries and ensure decisions for areas like marketing, operations and financial decisions are all made using the same data. Customer Relationship Management systems can also be used to co-ordinate the supply chain as well as organisational performance by ensuring better sharing of information. In summary use of information technology in e-procurement is considered to be a driver of innovation strategy action.*

**Keywords;** Electronic Procurement ; Performance ; Manufacturing firms ; Uganda; Igara tea estate; Procurement..

## 1.0 INTRODUCTION

### 1.1 Historical Perspective

E-Procurement is defined as the use of information and communication technologies (ICTs) to carry out individual or all stages of the procurement process which include sourcing, negotiation, ordering, receipt and post procurement review which leads to significant reduction in both cost and time. E-procurement has the capacity of acting as an integrative technology that enables integration and improvement of processes between departments. Flynn *et al*, (2010) define internal integration as the degree to which two departments collaborate in the management of both inter and intra departmental processes to provide maximum value for the firm. Researchers have argued that internal integration of various activities in an organization will be able to enhance economic performance (Flynn *et al*, 2010)

E-procurement actually automates the procurement and purchasing of a company by integrating the buyers and sellers through relevant IT systems. Although, e-procurement is still in its infancy, some companies have made impressive savings through radical streamlining of their buying activities. The automation of the end to end procurement work flow has taken over the traditional purchase order software since it helps in improve the organizational efficiency and control of the procurement activities and the need. The advent of cloud computing concepts and using the cloud process for e-procurement has automated the procurement process further. The management of contracts and agreements, comparisons, price list verification product, article selection has not only become simplified but also speedy (Chau, 2017).

The impact of web based technology has added speed or value to all the avenues and activities of business in today’s dynamic global competition. The ability to provide customers with life cycle costs and cost effective total solution for sustainable value has become vital. Business organizations are now under tremendous pressure to improve their efficiency and responsiveness in terms of operations, resource utilization and product development, resource utilization with transparency. With the emerging application of internet and information technology (ICT) the companies are forced to shift their operations from traditional way to a virtual e-

procurement and supply chain philosophy to transfer the company's activity to automated one (Carabello, 2017). A manufacturing firm refers to any business that uses components, parts or raw materials to make a finished good. A manufacturing company in Uganda operate various businesses that fall under several sectors (Blount, 2015).

### 1.2 Theoretical Perspective

This study employed the Principal-Agency Theory (PAT) advanced by Hieda & Norman, 2014) which states that E-procurement enables customers and suppliers to increase networking channel through the internet in terms of production planning, demand management and inventory management. This theory is the foundation model employed to ascertain the formation of this study. The economists founded this model to confront the issue related to principal and agents, where agents are persuaded to carry out some task on behalf of the principal (Hieda & Norman, 2014). The Principal-Agency Theory (PAT) concerns with the understanding that is put in place for an individual or entity (agent) to act in another's interest (principal). The postulations and proposition of PAT fit obviously with the issues concerning procurement and performance. For instance, the government which is in this case the principal/shareholder of the University of Nairobi chooses management (agents) to act on its behalf. For that reason, the procurement management is given power to make decisions on behalf of the government (Hieda & Norman, 2014).

In the process of managing supplier quality, buyers in agency relations are likely to be faced by possible risks. By nature, it is the expectation of buyers to get good and improved quality goods and services from suppliers, however, suppliers might be hesitant to spend considerably in quality. Zu and Kaynak (2012) observed that the difference between buyers and suppliers always result in the two parties concerning themselves only with their self-interests. PAT establishes the way procurement managers carry out the procurement practices on behalf of public universities. If there is existence of poor relationship between the principle and agent, then this could affect the relationship between the suppliers and the institutions. This study therefore, used this model to determine the procurement practices' role and the performance of organizations with focus on University of Nairobi.

### 1.3 Conceptual perspective

The study considered two variables that is E-procurement, as the independent variable and Organizational performance as dependent variable.

According to (Makabira & Waiganjo, 2014), E-Procurement is defined as the use of information and communication technologies (ICTs) to carry out individual or all stages of the procurement process which include sourcing, negotiation, ordering, receipt and post procurement review which leads to significant reduction in both cost and time. **E- data transmission** involves two facets that is, security and messaging agents (Ihkaya, 2012). **E-billing management system** involves calculating usage charges, generating and distributing invoices or statements to members of the e-procurement network (Abel, 2016). **E-sourcing** is basically transferring the sourcing paper process into internet-based process in which the organization will be publishing tenders and subsequently suppliers and venders will be responding and submitting their proposal online (Hamisi, 2018).

According to (Munir, 2014), Organizational performance is the actual output or outcomes of an institution and its intended outputs or goals and objectives. **Profitability** refers to the degree to which a business or activity yields profit or financial gain (Carabello, 2017). **Market growth** refers to an increase in the demand of a particular product or service over time (Chau, 2017). **Efficiency** refers to the ability of doing things well, successfully and without waste (Kaplan, 2015).

### 1.4 Contextual perspective

The study was carried out at Igara growers tea factory located in Bushenyi district western Uganda as the Industry is one of the big industries in Uganda serving over 10,000 customers country wide (Ministry of Finance Planning and Economic development report 2018). The company currently uses electronic procurement techniques like E-billing, E-data transmission and e-sourcing in performing its transactions and its evident that still its organizational performance has not yet increased to the expected despite employing electronic procurement techniques (Mundeke, 2018)

## 2.0 LITERATURE REVIEW

### 2.1 Theoretical review

#### Principal-Agency Theory

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## 2.2 Conceptual review

### 2.2.1 E-Procurement practices

E-procurement actually automates the procurement and purchasing of a company by integrating the buyers and sellers through relevant IT systems. Although, e-procurement is still in its infancy, some companies have made impressive savings through radical streamlining of their buying activities. The automation of the end to end procurement work flow has taken over the traditional purchase order software since it helps in improve the organizational efficiency and control of the procurement activities and the need. The advent of cloud computing concepts and using the cloud process for e-procurement has automated the procurement process further. The management of contracts and agreements, comparisons, price list verification product, article selection has not only become simplified but also speedy (Chau, 2017).

The impact of web based technology has added speed or value to all the avenues and activities of business in today's dynamic global competition. The ability to provide customers with life cycle costs and cost effective total solution for sustainable value has become vital. Business organizations are now under tremendous pressure to improve their efficiency and responsiveness in terms of operations, resource utilization and product development, resource utilization with transparency. With the emerging application of internet and information technology (ICT) the companies are forced to shift their operations from traditional way to a virtual e-procurement and supply chain philosophy to transfer the company's activity to automated one (Carabello, 2017).

Although forecasts on the use of e-procurement were downgraded with the burst of the internet bubble in 2001 (Davila *et al*, 2003), statistics still showed an increased growth in the use of e-procurement, for example a recent survey indicated that e-procurement of direct goods is now exceeding that of indirect goods (Bartels, 2014). Reason for the continued growth in e-procurement use is due to the significant benefits both supplier and buyer organizations achieve through its use. The benefits include shorter procurement cycles, reduced inventory levels, lower transaction costs, lower staffing requirements, higher degree of transparency and increased communication between supplier and buyer organizations. Yet, for all the benefits outlined there are many organizations that are taking a wait and see approach to the implementation of e-procurement technologies (Abel, 2016)

### 2.2.2 Organizational Performance

Organizational performance is the actual output or outcomes of an institution and its intended outputs or goals and objectives (Blount, 2015). Organizational performance can be measured through reduction in cost, quality of goods/services delivered, productivity, lead time (Mchopa, 2014 states that the most critical factor for effective management is Performance Measurement (PM) and that identifying and measuring the influence of Supply Chain Management (SCM) on it enhances the organizational performance. However, the subject of performance does not receive sufficient motivation in supply chain management research. The indicators of performance of an organization can be financial targets attained and satisfaction of labour force. On the same note, Hamisi (2018) observed that organization performance could also be estimated based on institutions effectiveness and efficiency.

According Venkatraman and Ramanujam (2016) the indicators of performance should be measured based on financial elements such as growth of sales, profit, return on investment, business performance and organization effectiveness. They emphasized that performance of an organization could be measured by observing quality of products and service, performance in the market, customers satisfaction, innovations of services, and labour force.

## 2.3 Related Literature

### 2.3.1 Electronic procurement and organizational performance

A system of procurement is termed to as an essential element of supply chain system in any given institution. Usually, procurement process of an organization includes operational and strategic processes as priorities in operations of the two entities which tend to differ. Products of procurement, management of supplier, requisitions of purchase orders as well as growth are among the key activities which are linked in procurement strategies (Bukanya, 2022). Most organizations decentralize their procurement tasks through procurement processes which work hand in hand with strategies that are in the centre of the processes of procurement. For a company to group together practices of purchasing, procurement will help to consolidate what will lead to greater discounts and better service from suppliers, the information acceleration found among the suppliers and buyers, reduction in hours administration, leaving them with more time to carry out duties, quickly respond to stiff competition in the entrants of new markets therefore improving the possibilities of championing new enterprises. Managing function of procurement effectively pioneers system performance in attaining its presumed goals of private public and sector (Hamisi, 2018).

Operationally, good procurement systems help in improving bettering precautions and auditing by making it possible for auditors and staff to countercheck and trail order transaction via the system, delivery time shorten by in terms of time cutting on delays mail documents, elimination of obstacles on time zone, since the procurement usage can be applied regularly, and therefore reducing levels of inventory, thus inventory costs (Blount, 2015). Chong and Ooi, (2008) assert that a procurement process which is termed to be well prepared and implemented increase the possibilities to organizations' inventories reduction, encompass good services to customers, cost reduction as well as aid fast turns of inventory. Among the major procurement benefits are through the condition of

short-range goals leading to productivity increase and inventory decline as well as less lead time. In relation to durable goals, the significance of these factors is responsible in expansion of market share plus integration of outside procurement activities (Bartels, 2014).

In addition, procurement helps to labor expansion through employee empowerment and improvement of quality of goods to come up with business rights to workplace. Performance of organization is measured through products and services quality, customer satisfaction, performance in market, innovation services, and relationships of employee (Ihkaya, 2012). On the other hand, Mundeke, (2018) research on performance of organization related to balanced scorecard, explained that assessment of performance of organizations is done based on investment returns, sales margin, utilization capacity, product quality and customer satisfaction. In addition, Munir, (2014) specified investment returns, market growth and sales, as well as revenue can be major elements in the measurement of performance of organizations. In all the performance measures, procurement practices have a positive relationship or generally affect the level of organizational performance.

### **2.3.2 Effect of e-data transmission on organisational performance**

Transmitting data over the Internet involves two facets. These are security and messaging agents. Messaging and data tools enable the Internet-based exchange of transactional data between different buyers and suppliers in the e-procurement marketplace. In order to do this, transactions are sent via the Internet as messages and then integrated into the back-office system thus enabling financial postings that coincide with the payment, invoicing and processes receipt (Ihkaya, 2012).

The impact of e-procurement on an organization routines and process has concentrated primarily on the internal alignment characteristics of practices and systems within IT/IS strategy. Security is an important aspect of any Internet transaction hence protecting buyer's confidential information and ensuring that only designated buyers have access to supplier product information is critical to ensuring confidence in any e-procurement system (Hamisi, 2018).

According to Laban, (2015) quality service has become a significant differentiator and the most powerful competitive weapon which many leading organizations possess. Supply chain management offers great potential for organizations improve organizational performance and reduce costs. Additionally pressures of shorter desired delivery time, shorter product life cycles and increased product variety have made it increasingly difficult to achieve high service levels with limited resources.

Since the introduction of commercially viable computers, both industry and government have sought ways to use information to improve processes, lower costs and raise productivity. One of the earliest forms of electronic commerce to be widely adopted was electronic funds transfer (EFT) between banks, using proprietary networks. These systems formed the basis for the millions of transactions now undertaken every day with credit cards and other forms of electronic payment. In the airline industry, electronic reservations and ticketing systems were developed and connected between carriers and travel agents, to lower the cost of doing business and to improve customer service (Ihkaya, 2012).

Cisco has been rated as the leading firm in the world in achieving integration of processes and data across multiple levels in the supply chain. Cisco created a virtual organization of linking its supply chain partners to a network of platforms which enables all of its business transactions to take place over the web. The customer network Cisco Connection Online (CCO) allows customers and resellers to place, configure and manage orders using automated ordering software. Users also have access to online technical assistance; a forum of intelligent agents and technical experts which support customer service. The supply side extranet Manufacturing Connection Online (MCO) is a resource for contract manufacturers, suppliers and logistics service providers giving access to real time order and data fulfillment. The vendors have direct access to order information allowing agile and swift response to customer requirements (Kraemer and Melville, 2014).

### **2.3.3 Effect of e-billing on Organizational performance**

E-billing management system calculates usage charges, generate and distribute invoices or statements to members of the e-procurement network. Suppliers also use the billing system to calculate ordering charges or to distribute operating costs for specific orders. Billing management functions must directly interface with back office invoicing systems to automatically generate bills thus E-procurement revenues are generally based on transaction fees (Chau, 2017).

Effective pricing enables buyers to negotiate best deals and sellers to liquidate excess inventory. Two major pricing options are used; these are Fixed Pricing and Dynamic Pricing. Fixed pricing is based on a predetermined price list or catalog prices negotiated between a buyer and seller. Dynamic pricing allows buyers and sellers to trade goods and services at prices determined by market forces instead of by a predetermined catalog or price list. An example of dynamic pricing includes business services such as reverse auctions, exchanges and auctions (Munir, 2014).

Billing management helps in reducing transaction costs by providing a higher level of accuracy in requisition, invoicing and payment through process automation and electronic documentation. By comparison, orders placed outside of an e-procurement system are unable to transmit errors and require additional resources during payment and invoicing. Bartels, (2014) argue that even when use is mandated, individuals find ways to circumvent official purchase processes in case they are dissatisfied with e-procurement provisions. Procurement and Contracting practices have control weaknesses with moderate risk exposures that require management attention related to contracting and government procurement clarity, monitoring mechanisms and planning on procedural requirements and expectations.

In some studies, e-procurement has been credited with increased accountability across functions. Mundeke, (2018) suggest that the migration from traditional procurement processes to e-procurement is one of the most effective ways to improve price establishments

and billing management among users. However, other studies argue that simply implementing e-procurement does not itself guarantee increased compliance. Specifically, it is argued that user perceptions of e-procurement provision may influence levels of contract and system and deserves further exploration.

### 2.3.4 Effect of e-sourcing on organisational performance

According to Laban (2016); very simply put, a supply chain is a system of organizations, resources, activities, people, information and technology involved in moving a product from a supplier to a customer. Any manufacturer or producer typically performs five steps in the supply chain: planning, sourcing (finding suppliers), making (manufacturing), delivering and returning (taking back defective goods). Supply chain efficiency, therefore, is the measure of getting the right product to the right place at the right time at the least cost. While processors want to measure their own supply chain efficiency, it is often the customer who ultimately judges them.

A lack of end-to-end, real-time supply chain visibility, the inability to obtain actionable and up-to-date data, poor response from suppliers and collaboration with partners, and a lack of integration and seamless business process management are all critical hindrances that prevent supply chain executives from improving their supply chains and meeting related objectives. As the capabilities of the technologies have developed and the price of accessing an e-Sourcing platform has fallen with greater competition for cloud-based solutions such as Software as a Service (SaaS), business cases for e-Sourcing have proven its worth. Therefore, the issue is not about whether the purchasing teams should be using e-Sourcing rather about ensuring the successful adoption of the system for it to consistently deliver the value that its capable of. Furthermore, there are some interesting developments along the e-Sourcing technology roadmap known as "Collaborative Optimisation". E-Sourcing is increasingly moving from being focused on specifying something comprehensively for which suppliers can propose a price offer, towards a more collaborative model. This enables suppliers to propose alternatives to selected elements of customers' specifications known as "Expressive Bidding". The variety of options that this then presents needs some strong analytical horsepower to resolve what the optimum solution is, and this is known as "Advanced Optimization" (Ihkaya, 2012).

According to Fynn et al., (2010), e-sourcing enables a company to work collaboratively to build, issue, and evaluate sourcing events via a secure online solution. From sourcing simplest products to complex categories, e-sourcing streamlines the way you do business, and lowers costs on both sides of the supply relationship. E-sourcing is a powerful end-to-end procurement management system that provides secure and compliant sourcing solution for organizations around the globe. E-sourcing is basically transferring the sourcing paper process into internet-based process in which the organization will be publishing tenders and subsequently suppliers and vendors will be responding and submitting their proposal online. E-Sourcing improves the Supplier Relations by bringing considerable improvements in transparency and openness between buyers and suppliers hence avoiding collusion as a bad practice. Such systems enable suppliers to see all tender opportunities through a single platform. This platform clearly indicates the opportunity type with deadlines, their current statuses and the final outcomes all clearly presented. The system facilitates information sharing through interaction and collaboration hence speedy communication and effective feedback so that both suppliers and buyers are aware of every single situation (World Bank, 2014)..

## 3.0 METHODOLOGY

### 3.1 Introduction

This section explained the approaches that were adopted in the study. It described the research design, study population, area of study, sample size and sampling technique, data types and sources and the data collection instruments. It included measurement of reliability and validity of the various instruments, and the data analysis procedures that were employed in the study.

### 3.2 Research Design

Across sectional survey design was employed in this study. Both qualitative and quantitative approaches to data collection and analysis were employed in order to get an in-depth understanding of the phenomenon under investigation and to confirm completeness for instruments

Table 2: research approach and relevance of the approach

Research Approach	Relevance of the approach
Quantitative approach	Numeric data
Qualitative approach	Descriptive data like sex

### 3.3 Study Population

The target study population of the study was 100 respondents comprising of the staff members and clients of Igara growers tea factory, Bushenyi district.

### 3.4 Sample Size and Sampling Technique.

In this study, simple random sampling was used to obtain the sample size of the study and also purposive sampling was used to select respondents where necessary. The sample size of the study was established using the Slovene's (1967) formula given a finite population and the degree of precision (reliability) desired by the study. The Slovene's formula states;

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$$n = \frac{N}{1 + Ne^2}$$

Where;  $n$  is the sample size,

$N$  is the known population of the study and

$E$  is the permissible error.

$$n = \frac{100}{1 + 100 * (0.05)^2} = 80$$

*Table 3: Population and the sample selected.*

Category	Population	Sample	Sampling technique
Top management	10	4	Purposive sampling
Accounting department	10	8	Purposive sampling
Auditors	3	1	Purposive sampling
Finance department	8	7	Simple random sampling
Clients	69	60	Simple random sampling
Total	100	80	

Source; Author, 2016

### 3.5 Data Sources

The study employed both secondary data from the journals and primary data that was collected directly from the respondents of Igara growers tea factory, Bushenyi district using a self-administered questionnaire.

#### 3.5.1 Primary Data

Primary data was collected by using a survey questionnaire. A survey questionnaire was used in the study because it is more appropriate for collecting data for a social survey research (Kaplan, 2015) and where the target population is literate and capable of filling the questionnaire. The questionnaire was designed with reference to variables of the study consisting of both structured and open ended questions. The structured questionnaire type enabled simple data analysis through tabulation with regard to frequencies and percentages.

#### Secondary Data

This was collected from existing reports and journals of the organization related to the topic of study. Furthermore, data was collected from past researches carried out by different researchers about the same topic on that particular institution.

### 3.7 Reliability and Validity of the Instruments

#### Reliability

Reliability in qualitative research has reached little attention in the development of methods; in fact to raise issues about the reliability of another's research has been considered taboo as if it is an accusation of incompetence (Kirk and Miller, 2016). Typically, qualitative interviews were assumed reliable when the same individual collects and analyses the data, as it is the case with this research. In this study, reliability of the instruments was the degree of resistance, reliable instrument that was given the same score when many or several times to measure the same variable provided has changed for a given entity.

## Validity

Validity in qualitative interviews is only achieved through the relaxed conversational approach when gathering information. In contrast to strict survey interviews in which interaction is sometimes restricted, qualitative interviewing allows opportunity for both parties to clarify what is being said. To establish validity, the designed instruments were available to the supervisor for review and she gave an approval for administration in a pilot survey. The study employed content validity whereby the researcher specified the indicators which are relevant to the concept being measured. A representative sample of indicators was selected from the domain of indicators of the concepts of the study variables using formula below;

$$\text{Content Validity Index (CVI)} = \frac{\text{the number of relevant questions.}}{\text{Total number of questions}}$$

### 3.8 Data Processing and Analysis

Collected data was edited, coded, and entered into the computer using the Statistical Package for Social Scientists (SPSS). The analysis involved Pearson correlation analysis and regression analysis. Pearson correlation analysis was used to determine the relationship between the study variables that is mobile banking and performance. Alternatively, regression analysis was used to establish the extent to which the independent variable can predict the dependent variable.

## 4.0 PRESENTATION, DATA ANALYSIS AND INTERPRETATION OF FINDINGS

### 4.1 Demographic characteristics of respondents

The respondents demographic characteristics include; Age, Sex, Level of education, Level of experience.

#### 4.1.1 Age of the respondents

**Table 4.1: Age distribution of respondent**

Respondents were asked questions related to their age and the results are shown in the table below:

Age group	Frequency	Percentage
Below 20	9	11%
20 - 29	9	11%
30 – 39	18	22%
40 – 49	26	33%
50 – above	18	22%
<b>TOTAL</b>	<b>80</b>	<b>100%</b>

**Source: Primary Data, 2022**

In reference to Table 4.1, (9)11% of the respondents were below 20 years, (9)11% were between 20-29 years of age, (18)22% were between 30-39 years of age, (26)33% were between 40-49 years and (18)22% were 50 years of age and above.

#### 4.1.2 Sex of the respondents

The researcher was interested in finding out the number of females and males in the whole of the population, and compares the percentage composition of the two. Therefore Sex was also another factor which was considered during the study.

**Table 4.2: Sex of the respondents**

Sex	Frequency	Percentage	Degrees
Males	36	44%	162 <sup>0</sup>
Females	44	56%	198 <sup>0</sup>
<b>Total</b>	<b>80</b>	<b>100%</b>	<b>360</b>

**Source: Primary Data, 2022**

Table 4.2, shows the sex of the respondents and it was found out that 36(162<sup>0</sup>) of the respondents were males and 44(198<sup>0</sup>) were females. This implies that majority of the employees at Igara tea company limited are females.

#### 4.1.3 The Educational level of respondents

Respondents were asked questions related to their educational status and their responses are shown in the table below;

**Table 4.3: Respondents level of education**

Level of education	Frequency	Percentage (%)
A' level	10	13
Graduate	30	38
Diploma	20	25
Post graduate	12	15
Others	08	10
<b>Total</b>	<b>80</b>	<b>100</b>

Source: primary data, 2022

Table 4.3 presents that the majority of the respondents represented by (30)38% were graduates,(12)15% were post graduates, (20)25% obtained Diploma,(10)13% obtained A'level and the least were Others with (8)10%. This implies that the researcher obtained valid and reliable data since the respondents were in position to read and translate the questionnaires.

#### 4.1.4 Level of Experience

The researcher asked the respondents the period they had spent on their jobs to find out their experience and knowledge about Impact of e-procurement and performance of manufacturing firms and the findings showed a high level of experience on the jobs by the respondents as captured in table 4.4 below.

**Table 4.4: Time spent on the current job by the respondent**

Number of years	Number of respondents	Percentage (%age)
Less than 2 years	13	16
2-3 years	12	15
3-4 years	35	44
4 years and above	20	25
Total	80	100

Source; primary data, 2022

#### 4.2: Effect of e-data transmission on organizational performance of Igara tea company limited, Bushenyi district

**Table 5: Distribution of responses on e-data transmission on organizational performance at Igara tea company limited, Bushenyi district.**

No.	Statement	SD	D	NS	SA	A	TOTAL
		%	%	%	%	%	%



1	The organization employs Automation method of e-data transmission	11.1	15.5	16.7	27.8	28.9	100
2	E-notification is highly practiced in my organisation	10.9	13.4	22.2	14.1	39.4	100
3	The organization excellently provide e-data transmission security	60.6	27.8	10.0	0.6	1.0	100
4	There is real time communication in the organisation	18.8	16.7	20.0	16.7	27.8	100

Source; Primary data,2022

SA – Strongly Agree, A – Agree, NS – Not Sure, D – Disagree SD – Strongly disagree

Table 4.5 above show the effect of e-data transmission on organizational performance at Igara tea company limited, Bushenyi district. This is evidenced by 56.7% of the respondents agreed that the organization employs automation method of e-data transmission, 53.5% of the respondents agreed that e-notification is highly practiced in my organisation, 44.5% of the respondents agreed that there is real time communication in the organisation, the organization excellently provide e-data transmission security, whereas 88.4% of the respondents revealed that the organization does not excellently provide e-data transmission security. This implies that most of the respondents were in support with electronic procurement practices through e-data transmission.

**4.3: Effect of e-billing management on organizational performance of Igara tea company limited, Bushenyi district**

**Table 4.6: Distribution of the responses on the effect of e-billing management on organizational performance at Igara Tea company limited, Bushenyi district.**

No.	Statement	SD %	D %	NS %	A %	SA %	TOTAL %
1	There is effective electronic inventory control in the organisation	8.9	9.4	15.0	29.4	37.2	100
2	Transaction costs are done electronically in our organisation			15.6	45	39.4	100
3	My organization carries out only E-accountability	47	33	10	10		100
4	Electronic Pricing policies do apply in our organization	3.3	5.0	5.0	31.7	45.0	100

Source; Primary data, 2022

SA – Strongly Agree, A – Agree, NS – Not Sure, D – Disagree SD – Strongly disagree

Table 4.7 above show the effect of e-billing management on organizational performance at Igara tea company limited, Bushenyi district. This is from the fact that 66.6% of the respondents agreed that there is effective electronic inventory control in the organisation, 84.4% of the respondents agreed that transaction costs are done electronically in our organization, 76.7% of the respondents agreed that electronic pricing policies do apply in our organization whereas 80% of the respondents revealed that the organization doesn't carry out only e-accountability. This implies that e-billing management is relevant and very important to the company as far as performance is concerned.

**4.4: Effect of e-sourcing on organizational performance of Igara tea company limited, Bushenyi district**

**Table 4.7: Distribution of the responses on the effect of e-sourcing on organizational performance at Igaratea company limited, Bushenyi district**

No.	Statement	SD	D	NS	A	SA	TOTAL
		%	%	%	%	%	%
1	My organisation employs e-sourcing	0.6	1.0	10.0	60.6	27.8	100
2	E-sourcing provides a secure and compliant sourcing solution for our Organization	18.8	16.7	20.0	16.7	27.8	100
3	E-sourcing improves supplier relationship	12	2.5	7.5	50	27	100
4	Work is collaboratively built, issued and evaluated through e-sourcing	15	25	10	40	30	100

Source; primary data,2020

SA – Strongly Agree, A – Agree, NS – Not Sure, D – Disagree, SD – Strongly disagree

Table 4.8 above show the effect of e-sourcing on organizational performance at Igara tea company limited, Bushenyi district. This is from the fact that; 88.4% of the respondents agreed that my organisation employs e-sourcing, 44.5% of the respondents agreed that e-sourcing provides a secure and compliant sourcing solution for our Organization, 77% of the respondents agreed that e-sourcing improves supplier relationship and lastly 70% of the respondents revealed that work is collaboratively built, issued and evaluated through e-sourcing. This implies that e-sourcing plays a very important role on organizational performance at Igara tea company limited, Bushenyi district.

## 5.0 DISCUSSION OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

### 5.1 Discussion of the findings

#### 5.1.1 Effect of e-data transmission on organizational performance of Igara tea company limited, Bushenyi district

Findings on the effect of e-data transmission on organizational performance at Igara tea company limited, Bushenyi district show that; 56.7% of the respondents agreed that the organization employs automation method of e-data transmission, 53.5% of the respondents agreed that e-notification is highly practiced in my organisation, 44.5% of the respondents agreed that there is real time communication in the organisation, the organisation excellently provide e-data transmission security, whereas 88.4% of the respondents revealed that the organization does not excellently provide e-data transmission security. This implies that most of the respondents were in support with electronic procurement practices through e-data transmission.

#### 5.1.2 Effect of e-billing management on organizational performance of Igara tea company limited, Bushenyi district

Findings on the effect of e-billing management on organizational performance at Igara tea company limited, Bushenyi district show that; 66.6% of the respondents agreed that there is effective electronic inventory control in the organisation, 84.4% of the respondents agreed that transaction costs are done electronically in our organization, 76.7% of the respondents agreed that electronic pricing policies do apply in our organization whereas 80% of the respondents revealed that the organization doesn't carry out only e-accountability. This implies that e-billing management is relevant and very important to the company as far as performance is concerned

#### 5.1.3 Effect of e-sourcing on organizational performance of Igara tea company limited, Bushenyi district

Findings on the effect of e-sourcing on organizational performance at Igara tea company limited, Bushenyi district show that; 88.4% of the respondents agreed that my organisation employs e-sourcing, 44.5% of the respondents agreed that e-sourcing provides a secure and compliant sourcing solution for our Organization, 77% of the respondents agreed that e-sourcing improves supplier relationship and lastly 70% of the respondents revealed that work is collaboratively built, issued and evaluated through e-sourcing. This implies that e-sourcing plays a very important role on organizational performance at Igara tea company limited, Bushenyi district.

### 5.2 Conclusions

The aim of this study was to explore the influence of e-procurement on the organizational performance of manufacturing firms in Uganda.

The output from the findings indicate that there is a significant positive relationship between the components of e-procurement namely e-data transmission systems, e-billing management and e-sourcing with the organizational performance. Prior to e-procurement, procurement often dealt with administrative routine duties as well such as individual transactions, converting purchase requests into purchase orders or ensuring the correct amount of inventory is maintained and therefore, the use of e-procurement technologies in e-procurement is aimed at realizing faster and more efficient operational procurement processes hence reducing procurement costs and thereby enhancing organizational performance.

### 5.3 Recommendations.

The researcher recommended the following;

Manufacturing firms in Uganda need to incorporate all the e-procurement components into the system. This will enable them to improve the overall organizational performance of their firms. The manufacturing firms need to find out ways of encouraging employees to make use of e-procurement systems. If employees are encouraged to use the e-procurement, adoption of the same will greatly improve.

It is therefore recommended that Enterprise resources planning (ERP) systems in particular should be concerned with trying to integrate and co-ordinate the various internal functional areas in order to break down those functional boundaries and ensure decisions for areas like marketing, operations and financial decisions are all made using the same data. Customer Relationship Management systems can also be used to co-ordinate the supply chain as well as organisational performance by ensuring better sharing of information. In summary use of information technology in e-procurement is considered to be a driver of innovation strategy action.

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