



Research Paper

## Factors Affecting the Adoption of E-Procurement in Public Sector in Nigeria

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### ABSTRACT

Since the advent of the Internet, the use of Internet-supported information and communication technologies (ICTs) has led to advancements and development of different sectors in the world. However, one aspect of this development that has shown great potential for improving the performance of other country's procurement industry with the use of electronic communications and transaction processes when buying supplies and services or conducting tendering for works, which is referred to as electronic (e-) Procurement. Therefore, the aim of this study is to ascertain the factors affecting the adoption of E-procurement in public sectors such as in health, construction, economy, and education sectors in Nigeria. The methodology used in this study was a survey based cross-sectional research design. It made use of single research design which is made up of quantitative research. The Quantitative research gleaned its data from the survey responses of 50 selected workers in the ministry of procurement in Nigeria. This includes the Senior Procurement Officers, Admin/Operations Officer, Procurement Manager, Chief Investigation Officer, and finance officer in different public procurement ministry in Nigeria. The result of the descriptive analysis showed that the uptake of e-Procurement in Nigeria is rather too slow and low. This is because of many factors like Technical, infrastructure, political, social, and cultural issues; the lack of evidence of the benefits of e-Procurement in the building industry; and lack of financial ability to use e-Procurement in different organizations. Strengthening negotiations, budget approval, feedback mechanism and strategic sourcing were recommended to help push for the process in Nigeria.

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## I. INTRODUCTION

### 1.1 INTRODUCTION

All nations including Nigeria are looking for ways to save money through more efficient procurement practice.

e-Procurement has been embraced in other nations because of its advantages including increase in profit margin, reduction in errors associated with paper-based methods and reduction in the procurement cost.

Despite the benefits of e-Procurement several procurement departments in Nigeria have not embraced it. There is also no statutory requirement for the adoption of e-Procurement under the Procurement Act, 2007.

This study looked at the benefits of e-Procurement, factors affecting its adoption and how the challenges may be surmounted. The scope of study was Ministries and agencies in Port Harcourt, Rivers State.

Public procurement is defined as the purchase of commodities and contracting of construction works and services if such acquisition is affected with resources from state budgets, local authority budgets, state foundation funds, domestic loans or foreign loans guaranteed by the state, foreign aid as well as revenue received from the economic activity of state. Public procurement thus means procurement by a procuring entity using public funds (World Bank, 1995).

Public procurement must be transacted with other considerations in mind, besides the economy. These considerations include accountability, non-discrimination among potential suppliers and respect for international obligations. It is worth noting that unlike private procurement, public procurement is a business process within a political system and has therefore significant consideration of integrity, accountability, national interest, and effectiveness (Wittig, 1998).

Besides, it was realised that the Procurement personnel were not adequately trained and there was also lack of professionalism amongst themselves, and there was no professional body to oversee and install discipline among procurement officers (Mose,2012). It was in view of all these shortcomings that the Nigeria government in conjunction with other stakeholders like the International Trade Centre, World Bank and the Africa Development Bank, thought of looking for a way to eliminate the deficiencies by initiating the procurement reform process. As Mose (2012) notes, the reform process was meant to create a system that allowed proper delegation of authority, procurement threshold, planning and development of supplies manual. The primary focus was to address the issue of procurement laws, establish appropriate procurement Institutions and entities, and create adequate and timely monitoring and evaluation mechanism. This marked the birth of Public Procurement Act (2007).

Manual procurement system has been in use not only in the private sector but also in the government state corporations. Public procurement is an important function of government (Thai, 2001). Instead of satisfying requirements for goods, works, systems, and services in a timely manner (Vaidya, Sajeew and Callender, 2006), the Nigerian procurement system had proved to be long, cumbersome and time consuming. This procurement system had several deficiencies that contributed to huge losses in public funds (Mose, 2012). It has also proved to be costly for both buyer and supplier or organizations, besides being regarded as a perpetrator of corruption. However, (Wittig, 2003; Callender & Schapper, 2003) that noted that a good procurement system must meet the basic principles of good governance: transparency, accountability, and integrity. With these in mind, the government in conjunction with decided to introduce e-procurement in state corporations. A pilot plan was initiated by Bureau of Public Procurement (BPP) Abuja and MDAs were trained in Public Procurement Research Centre in Federal University of Technology Owerri on how it works, and the application known as NOCOPO.

Nigeria Open Contracting Portal (NOCOPO) is about opening public procurement in Nigeria through increased disclosure of procurement information to all stakeholders with a view to ensuring improved transparency and accountability, improve competition, prevent corruption, enhance active citizen participation towards achieving better service delivery and improved ease of doing business in Nigeria.

This NOCOPO portal, conceived by the Bureau of Public Procurement (BPP) in line with Section 5(r) of the Public Procurement Act, 2007, was co-created with Civil Society Organisations in fulfilment of Commitment of the Nigeria National Action Plan of the Open Government Partnership which is "Full implementation of Open Contracting and adoption of Open Contracting Data Standard in the public sector".

The Bureau of Public Procurement's NOCOPO won global Government Innovation Award. "The award is conferred as part of the Open Contracting Innovation Challenge, a competition (with 88 teams from 40 countries) run by the Open Contracting Partnership and the Open Data Institute (ODI) to recognize groundbreaking data-driven ideas for improving public procurement. The Innovation Challenge honours original ideas for managing, analysing, and monitoring how the government buys goods and services, as well as cutting-edge approaches to publishing what gets bought, when, from whom, and for how much.

Therefore, study aimed to establish whether e-procurement has achieved its intended objectives of making procurement more efficient and effective. The objectives of the study were to assess the extent of use of e-procurement in public hospitals, to identify the various traditional procurement problems that have been reduced by the introduction of e- tendering in public hospitals and to determine the extent to which the traditional procurement problems have been reduced through e-procurement.

## **1.2 STATEMENT OF PROBLEM**

Nigeria is a developing country suffering a deficit in infrastructure and human capital development. To propel the nation to greater heights the adoption of cost-saving modern procurement practices is important.

However, the public sector neither has the facilities nor the manpower for modern procurement practices, the cost of acquiring and operating e-Procurement package, the geographical spread of the software and network availability etc. were all identified as challenges which were discussed in the work.

## **1.3 AIM AND OBJECTIVES OF THE STUDY**

The primary aim is to evaluate the factors that militate against the adoption of e-Procurement in the public sector in Nigeria.

The objectives of the study are to:

- i. Identify the advantages of e-Procurement.
- ii. Evaluate why e-Procurement has not been implemented in the public sector in Nigeria.
- iii. Identify the possible challenges militating against the adoption of e-Procurement in Nigeria.
- iv. Recommend ways of improving the application of e-procurement in Nigeria.

## **1.4 SIGNIFICANCE OF THE STUDY**

The significance is classified into theoretical and practical significance.

Theoretically, this study can contribute to the robust study of e-Procurement at all levels by enriching the available knowledge base on the subject.

The practical significance is that this study will provoke interest in e-Procurement by the public sector which will lead to better procurement practices and accelerated development for Nigeria.

### **1.5 SCOPE OF RESEARCH**

The study sought to primarily propose Factors Affecting the Adoption of E-Procurement in Public Sector in Nigeria.

The study limited its scope to procurement process in adopting e-procurement. The study further focused on the preparation of procurement plan for goods, works and services using e-procurement applications. In addition, it focused on the stakeholders or personnel involved in the procurement planning process; primarily procurement officers of selected FGN MDAs in Nigeria.

## **II. LITERATURE REVIEW**

### **2.0 LITERATURE REVIEW**

Procurement activities can be grouped and defined in three different ways: indirect procurement, direct procurement, and sourcing (Minahan and Degan, 2001) as quoted in Eadie et al (2007). They further argue that indirect procurement involves selecting, buying and management of supplies for the day to day running of the company while direct procurement involves buying goods and organizing activities to manufacture finished products. Sourcing can apply to both indirect and direct procurement and involves a four-phase model (information, negotiation, settlement, and after-sales) (Kim and Shunk, 2003) as quoted in Eadie et al (2007). They note that tendering involves the first three stages of this model. Electronic procurement / tendering is not a strategy but the use of electronic means to carry out the procurement / tendering process (Minahan and Degan, 2001) as quoted in Eadie (2007).

Thought the buying process has considerably changed with the introduction of the internet and e-procurement removing lost time and errors resulting from the exchange of paper and retyping of data (Egbu et al, 2003), most African countries seem to lag in embracing this technology. This would be attributed to either resistance to change or the cost implication (direct and indirect) needed to initiate the system. In Europe however, most countries have operationalized e-procurement.

#### **2.1 Types of E-Procurement**

Baily (2008) classifies e-procurement into the seven categories: the first is Web-based ERP (Enterprise Resource Planning). This deals with creating and approving purchasing requisitions, placing purchase orders and receiving goods and services by using a software system based on Internet technology. The second category is E-MRO (Maintenance, Repair and Operations) which deals with creating and approving purchasing requisitions, placing purchase orders and receiving non-product related MRO supplies. The third type is E-sourcing. This involves Identifying new suppliers for a specific category of purchasing requirements using Internet technology. The fourth type is E-tendering which involves sending requests for information and prices to suppliers and receiving the responses of suppliers using Internet technology.

E-reverse auctioning is another type of e-procurement. This uses Internet technology to buy goods and services from several known or unknown suppliers. The sixth type is E-informing which involves gathering and distributing purchasing information both from and to internal and external parties using Internet technology. The last type of e-procurement, according to Baily (2008), is E-market sites. Here, buying communities can access preferred suppliers' products and services, add to shopping carts, create requisition, seek approval, receipt purchase orders and process electronic invoices with integration to suppliers' supply chains and buyers' financial systems.

#### **2.2 Benefits of E-Procurement**

According to Eadie et al (2007), An organization which uses E-procurement has the following advantages: First, Price reduction in tendering: Empirical studies carried out Gebauer et al (1988) in the United States of America indicated that the two most important measures for the success of procurement processes are cost and time. In this method, there is no paperwork, postage fee and other costs associated with preparation and sending tender documents. It is also faster to send a document electronically as compared to the traditional method of sending tender documents through post office. It results to improved order tracking and tracing, for it is much easier to trace the orders and make necessary corrections in case an error is observed in the previous order.

Secondly, there is reduction in time to source materials: In Reduction in time has been proved as a relevant benefit by Knudsen (2003) quoted in Eadie et al (2007), who says "*E-procurement is a rapid efficient method of finding and connecting new sources, being a lean channel for communication*". A lot of time is spend on paper invoicing in terms of writing, filing and postal communication but while in e-procurement, staff have sufficient time to engage on strategic issues of procurement The time wasted in moving from one town or country

to another to look for a potential supplier or buyer is greatly reduced since with a click of a button, you can readily get the information in the internet. By extension, E-procurement leads to reduction in maverick buying. Maverick buying is when staff buys from suppliers than those with whom a purchasing agreement has been negotiated. Thirdly, Lower Administration costs: in his research, Rankin (2006) argues that e-procurement results in reduction in paperwork and this leads to lower administration costs. Fourthly, Reduction in procurement staff: since most of the procurement process is done electronically, the number of staff needed to facilitate the process reduces.

As Eadie et al (2007) noted, the reduction in staff is an important way of producing competitive advantage through reduced costs. This is further supported by Egbu et al (2003) in his study which revealed that through implementation of an e-procurement system, a steel supplier was able to carry out a multi-million pound project with only 20% of the staff the company would normally have used. Fifthly, e-procurement gives an organization competitive advantage over its competitors. As a centralized department can oversee all procurement activities and different offices worldwide can access the same documentation when required, this gives a distinct advantage over the much slower process of having to post documentation between offices. This extends the supply chain beyond geographical boundaries to a much wider group. Suppliers can be monitored on timely delivery, quality delivery of products and services hence performing suppliers can be contacted in future. This raises other logistical considerations which may impact on scheme quality (Eadie et al, 2007). This implies that with e- procurement, every prospective supplier and buyer is always accessible to his/her convenience. The result is not only greater market access but also increased productivity.

Another benefit of e-procurement is improvement of communication: Eadie et al (2007) argues that e-procurement allows sections of electronic documentation to flow through the supply chain; it improves the speed of returns and subcontractor price visibility. He further notes that since it is easier to communicate requirements in a quicker more accessible manner, it will result in a better understanding of requirements and due compliance besides allowing clients to gauge the state of the market by seeing how much interest is shown in the tender. Hawking et al, (2004) as quoted in Eadie et al (2007) considered market intelligence and the decisions made on that intelligence as two separate drivers. They however state that since reliable procurement decisions cannot be made without market intelligence and each is reliant on the other for the purpose of this study these two are considered together as "Improved Market Intelligence and Enhanced Decision making". A reduced Operating and Inventory cost is also another benefit of e-procurement: This is from the fact that much if not all paperwork is eliminated. Postage costs are also not incurred, among other expenses associated with sending and receiving documents when sending them by post.

Other benefits are enhanced inventory management, increased accuracy of production capacity and negotiated unit cost reduction (Hawking et al, 2004) as quoted in Eadie (2007).

### **2.3 Perceived challenges with E-Procurement**

Despite its benefits, e-procurement is also faced with some problems that hinder its adoption in various departments. Eadie (2007) identifies the following notable challenges: Company culture and upper management support: Davila et al (2003) points out that resistance to change, lack of a widely accepted solution and lack of leadership, which are cultural, are some of the biggest barriers to the introduction of e-procurement within the public sector. To counter this problem, Eadie (2007) points out that a cultural change needs to take place prior to adoption of an e-procurement system. People need to be appointed and backed with full senior management support in order to effect this change. Adequate sensitization on the system will greatly reduce the resistance to the change. As pointed out by Eadie (2007), it is the cultural change brought about by senior management support which can enable e-procurement to be successfully implemented. Another challenge is uncertainty as to the legal position of e-procurement. Some organizations doubt whether electronically sent documents can be recognized by a third party as valid or legal. For example, Wong and Sloan (2004) in their study quoted in Eadie et al (2007) showed that although ICT is recognized to have improved communication in construction, on the negative side it also showed that only 26% of respondents agreed that ICT was acceptable as admissible written proof during construction. Only 17% thought that it was acceptable as a written notice. The same results were also noted by Julia-Barcelo (1999). Lack of IT infrastructure is also another challenge of e-procurement. This was evident in the research carried out by Wong and Sloan (2004) as quoted in Eadie et al (2007) who noted that most companies lacked the relevant technology to carry out e-procurement. The same sentiments are shared with Harrigan (2008) whose research found out that technological integration, data quality, system-to-system integration, and ICT/technical issues have been identified as major challenges for many organizations when implementing e-procurement (Harrigan,2008).

The fourth challenge is the cost implications of the system. Some organizations perceive the system is too expensive to implement. Budgeting and costs, change management, as well as need of training and resources Harrigan (2008). Therefore, in their opinion, they would rather stick to their system. Furthermore, engaging suppliers in the process - especially smaller organizations - is also proving to be difficult given the level of investment expected in terms of providing catalogue information to buyers, and marketplaces using different

technologies, platforms, and business languages (OGC, 2002). As noted by Heywood (2002), sometimes e-Procurement results in large investments of time and money, without absolute certainty that its full potential will be achieved every time. Besides, there is also lack of technical expertise. Most organizations lack the expertise to operate the system if initiated. In their view, embracing e-procurement technology implies employing the necessary manpower to operate it. Lack of e-procurement knowledge / skilled personnel is another barrier hindering smooth implementation of e-procurement. The older generation that has not kept up to the advances in IT related issues. This makes them rely heavily on traditional forms and means of procurement. In fact, this forms the majority of those against change, especially when the change requires anything more than the training they already have. Therefore, as e-Procurement includes new technologies and changes in traditional procurement approaches, the need to train staff in procurement practices and the use of e-Procurement tools are critical to the success of an e-Procurement initiative (World Bank, 2003).

The seventh challenge stated by Eadie (2007) is lack of a business relationship with suppliers capable of e-procurement. Hawking et al (2004) argues that lack of business relationships with suppliers showing the need for an e-procurement enabled supply chain as another barrier for the implementation of e-procurement. The eighth challenge is Security of transactions. Working on the internet has become risky due to hacking of information. This has made organizations fear using it. Banks have lost money. Data which is transmitted on the World Wide Web can be garbled, can reassemble wrongly at the other end, or can display only partially because of incompatible software (Jennings, 2001). There are also interoperability concerns: Providing procurement information over the internet produces interoperability concerns. This is since software companies have sought to make their product unique. In doing so, they have endeavored to stop migration of data between systems. Rankin (2006) further shows that compatibility, interfacing with other systems and stability, are technical issues which have become barriers to e-procurement implementation. Lastly, organizations are of the view that there is no business benefit realized.

Research by Egbu et al (2004) established that there is no significant business benefit realized by embracing e-procurement. Mose (2012) did research on an assessment of the extent of compliance with public procurement and disposal act 2005 in level 5 hospitals in Kenya. This was a case study of Kisii level 5 hospital in Kisii County. The main objective of the study was to assess the extent of compliance with PPDA (2005) at Kisii Level 5 hospital. Her research established that those members of staff with responsibility of handling procurement matters had not been sensitized on PPDA (2005) and its regulations (2006). She further noted that the hospital had complied on areas of tendering, which was done competitively, inspection and acceptance of goods, works and services; and appointment of committee members. This is evident when the hospital has got 4 standing committees represented. However, the research noted that the hospital had not complied in areas of procurement planning, lead-time pricing, meeting user specifications which might have been the reason for shortages, partial deliveries and stock outs resulting to not meeting PPDA (2005) objectives. The research recommended that Level 5 hospitals in Kenya should be advised to come up with a training policy for their staff and sensitize their staff on Procurement matters.

To avoid the problems of stock-out, the research suggested that the procurement units and suppliers should work as partners to enhance their relationship and that quality should be the center in all purchasing activities since "Meeting the user's specification makes the work of inspection and acceptance committee easier, and reduces returned supplies and re-works of works and service which lengthens lead-time." Mose (2012). The research further suggested the following: First, the price quoted, and terms of payment should be clearly negotiated to avoid non-delivery and partial-deliveries which leads to stock-outs. Secondly, procurement plans should be prepared in time, consolidated in line with annual budget estimates, and presented to the Accounting Officer of the entity for approval before 1<sup>st</sup> July of any financial year since this will reduce under-stocking and over-stocking. Lastly, the cost sharing funds should also be projected and planned for accordingly.

### **III. RESEARCH METHODOLOGY**

#### **3.1 Research Design**

The methodology used in this study was a survey based cross-sectional research design. It made use of single research design which is made up of quantitative research. The Quantitative research gleaned its data from the survey responses of 50 selected workers in the ministry of procurement in Nigeria. This includes the Senior Procurement Officers, Admin/Operations Officer, Procurement Manager, Chief Investigation Officer, and finance officer in different public procurement ministry in Nigeria. This research methodology is therefore an effective and methodical technique to gather data to ascertain the factors affecting the adoption of E-procurement in public sectors such as in health, construction, economy, and education sectors in Nigeria.

#### **3.2 Research Approach**

This study utilized a single survey-based method research strategy due to the unique concerns and aims of this investigation. The approach in question combined the quantitative information and gave an in-depth

examination of the research questions and aims. The evaluation therefore aided in the discovery of key concerns via in-depth questionnaire (Murab, 2014).

### **3.3 Study Duration**

The research lasted for a period of 2 months from November 2022 till December 2022. This duration is effective to get sufficient data necessary to make the research quality and valid.

### **3.4 Study Population**

The target population for this study included the entire group of individuals to which the results were generated. The study population contains 50 selected public procurement officers in Health, construction, and education sectors in Nigeria. This includes the Senior Procurement Officers, Admin/Operations Officer, Procurement Manager, Procurement Specialist, and finance officers in Nigeria.

### **3.5 Study Area**

The research took place in Nigeria which is a federal republic comprising 36 states and the Federal Capital Territory, where the capital, Abuja, is located. It is the most populous African country located in west Africa.

### **3.6 Data selection.**

The study reviewed the factors affecting the adoption of E-procurement in public sectors such as in health, construction, economy, and education sectors in Nigeria. Firstly, to collect primary data for the research, 8 questions were provided in the questionnaire and sent to 50 selected officers in ministry of procurement in Nigeria. (Mujih, 2004). The total of 8 questions were set with the aim of getting the background information of the respondents and an explicit answer to the research questions. This generated quantitative data needed for the study. Each of the selected respondents were informed of this study and they all gave their consent. However, they were those who due to lack of time or personal choice decided to be absent for the survey. The survey for this study was administered among infrastructure, health and education procurement personnel within local government authorities' works departments and within state ministries, agencies and institutions in Nigeria.

The personnels were strictly observed and selected to cover both gender and all basic fields of procurement unit in the company. However, at the end of the scrutiny a total of 50 respondents were selected to provide answers to the questionnaire. Participants were chosen for the study with their informed consent and complete anonymity guaranteed. This made sure that respondents were talking about the things that interested them. The respondents were selected using the purposive sampling technique. Only those who were ready to express themselves were selected, also MDAS who have been in the business for a longer time were selected for the survey.

### **3.7 Data Collection**

A quantitative data collection method was used for to collect primary data for the research. The quantitative approach employed the use of a questionnaire to collect data; this method also documented participant background and helped shape research aims. However, the questionnaire encouraged thoughtful and organized responses and designed based on findings from the review of literature (Mujih, 2004).

The phenomenon was explained by the quantitative research strategy, which involved collecting numerical data and analyzing it using statistically based approaches (Mujih, 2004). Since this study required statistical analysis based on population responses, we opted for a quantitative research approach. In this case, the sample size was not crucial, but efforts were made to ensure a cross-section of the population were included. In addition, Two PhD students doing research in the field of Political science also contributed to the study by verifying some data and adding to the body of knowledge already present.

#### **3.7.1 Data size**

The total data size for this research is 50 and was drawn from key players in the selected Federal Government of Nigeria MDAs. These respondents provided answers via questionnaire to support the study. The questionnaire contains 8 questions (4 were based on the background of the respondents while the remaining 4 questions were based on the research questions). Since it is unrealistic to expect participation from the complete population of interest, the sample size is adequate for the study.

#### **3.7.2 Validity and Reliability**

This study's validity and reliability were ensured by a thorough examination of available secondary sources. There was also access to the primary informants' feedback on the report outline. This study's procedures were validated by comparing them to those employed in similar studies. The results of the questionnaire were double-checked by experts in Medicine in an effort to strengthen the study's external validity. According to Yin (2009), when discussing the precision or dependability of a study, it is common practice to refer to the use of quantitative survey, with the assumption that all respondents will be asked the same questions and face the same conditions. To ensure reliability here, another researcher is expected to be able to conduct the similar research and get the same result. The goal of this was to minimize biases and errors. So therefore, for this to work, there was

need to document the study carefully and send back the data for proper scrutiny. These were done to ensure validity and reliability. (Trost, 2010).

### 3.8 Ethical Considerations

Ethical standards were followed during this study. The respondents' openness, privacy, and secrecy were all respected. Consent was gained from all participants voluntarily. Respondents' identities were concealed and they were able to respond anonymously. All concepts were discussed in detail, and a comprehensive summary of the research issues was provided to the respondents. The safety of the respondents were ensured to the greatest extent possible by reducing or eliminating all potential threats. The researcher was also constrained by ethical concerns into using survey responses exclusively for study. All copyrights were respected during the current investigation. In the future, therefore, consent will be necessitated for any other reason.

### 3.9 Data Analysis

Quantitative data generated through the survey completed by the parents were analysed using Statistical Package for Social Science (SPSS) software version 23. Two main types of analyses were conducted. The first analysis was descriptive statistics which generated frequency distribution tables, graphs and charts through which the results were analysed effectively. This also helped to evaluate the link between the variables in the research. The second analysis was exploratory factor analysis using principal component analysis and Varimax rotation method. This analysis was used to address the second objective of the study. It is noteworthy that only responses from those who indicated that they have used e-Procurement were included in this analysis.

## IV. RESULTS

### 4.0 RESULTS

This chapter focuses on the data obtained on to ascertain the factors affecting the adoption of E-procurement in public sectors such as in health, construction, economy, and education sectors in Nigeria. The results were arranged in such a way it answers the research questions. Statistics analysis was conducted on the data and illustrated fully.

For this study, a total of 50 responses were generated from 8 questions in the questionnaire. The first four questions were aimed at getting the background information of the respondents. The remaining 4 was aimed at responding to the research Questions and the main objectives of the study. Thereafter, the results gotten were analyzed using SPSS software.

#### Background of respondents

This section is aimed at generating a demographic and general overview of the respondents. The sex, age, length of employment and their occupation.

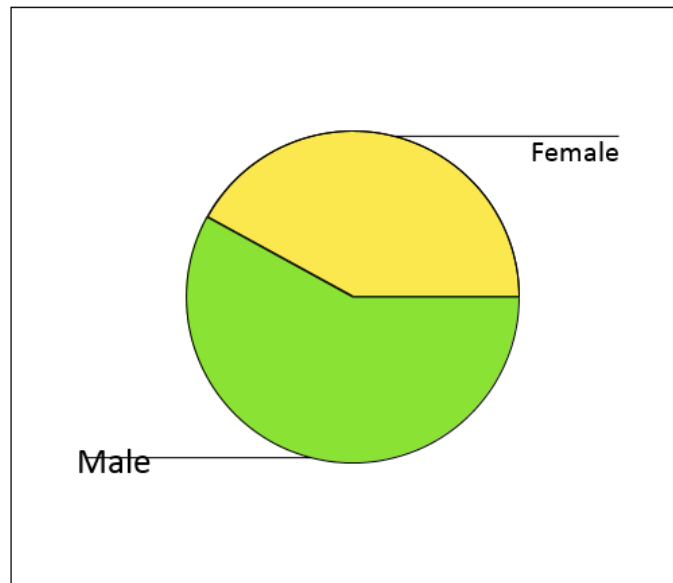
##### 4.1.1 Gender of the Respondents

Table 4.1 showed the gender distribution of the respondents. It was observed that out of 50 respondents, 58% formed the majority in males while 42% were the minority in females. This is not surprising since most of those in procurement sectors in Nigeria are males.

**Table 4.1: Gender of the respondents**

<i>Value Label</i>	<i>Value</i>	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cum Percent</i>
	Female	21	42.00	42.00	42.00
	Male	29	58.00	58.00	100.00
	<i>Total</i>	50	100.0	100.0	

**Fig 4.1: Gender of the respondents**



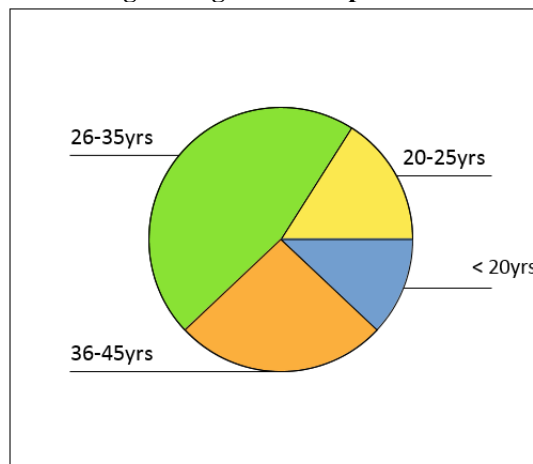
**4.1.2 Age of the respondents**

Table 4.2 showed the age distribution of the respondents. It was observed that those within the age range of 26-35 years formed 46% of the total respondents. This is as expected since they fall under the active age group who are within the government working age group in public sectors. However, 26% of the respondents fall within 36-45years, 16% fall within 20-25years while 12% were less than 20years. However, none of the respondents exceeded 45years of age.

**Table 4.2: Age of the respondents**

Value	Frequency	Percent	Valid Percent	Cum Percent
20-25yrs	8	16.00	16.00	16.00
26-35yrs	23	46.00	46.00	62.00
36-45yrs	13	26.00	26.00	88.00
<20yrs	6	12.00	12.00	100.00
	50	100.0	100.0	

**Fig 4.2: Age of the respondents**





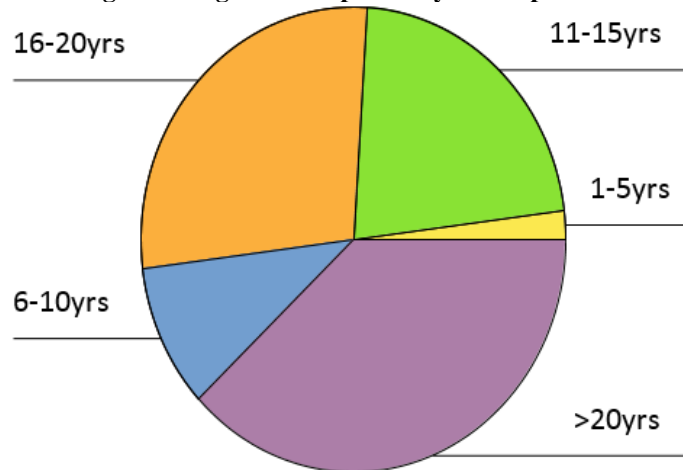
**4.1.3 Length of occupation by the respondents**

Table 4.3 shows the number of years each respondent has worked in the public sector. It was discovered that most of the respondents have stayed more than 2 years in the work. 38% of the respondents have stayed more than 20 years, 28% have stayed between 16-20years, 22% have stayed between 11-15 years, 10% have stayed 6-10years in the work while only about 2% spent 1-5 years the public sector. This is valid in order to ensure that the respondents have gathered enough experience for the study.

**Table 4.3: Length of occupation by the respondents**

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1-5yrs	1	2.00	2.00	2.00
	11-15yrs	11	22.00	22.00	24.00
	16-20yrs	14	28.00	28.00	52.00
	6-10yrs	5	10.00	10.00	62.00
	>20yrs	19	38.00	38.00	100.00
	<i>Total</i>	50	100.0	100.0	

**Fig 4.3: Length of occupation by the respondents**



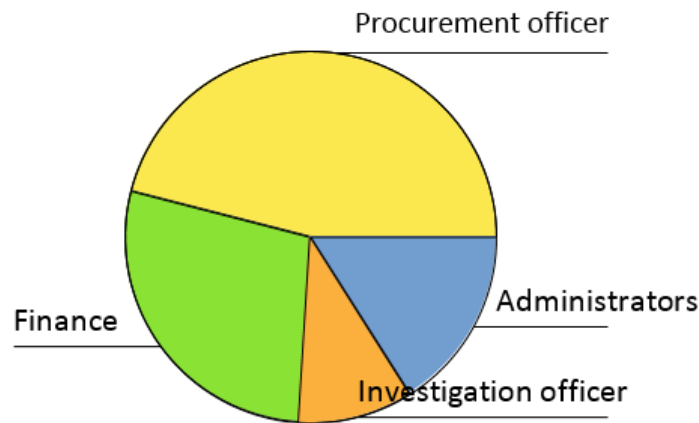
**4.1.4 Primary occupation of the respondents**

Table 4.4 showed the demographic distribution of the respondent’s occupation. The distribution was selected in a way that it covers government officials in ministry of procurement. Among the respondents, 46% were procurement officers or procurement specialist working in the public sector, 28% were finance officers, 16% were ICT administrators while 10% were Investigation officers.

**Table 4.4: Occupation of the respondents**

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	Procurement officer	23	46.00	46.00	46.00
	Finance officer	14	28.00	28.00	74.00
	Investigation officer	5	10.00	10.00	84.00
	ICT Administrators	8	16.00	16.00	100.00
	<i>Total</i>	50	100.0	100.0	

**Table 4.4: Occupation of the respondents**



**Presentation and analysis of the research Questions**

This section attended the research questions and also performed an extended research into realizing the objectives and aim of the study.

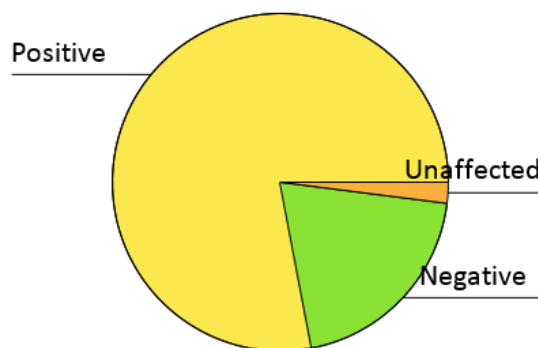
**4.2.1: General perception of the respondents on the impact of E-procurement system in the public sector**

Table 4.5 shows the overall perception of the impact of E-procurement system in the public sector. 78% of the total respondents agreed that it will have a positive impact on the public sector and the country economy and infrastructure while 20% agreed that there is negative impact whereas only about 2% agreed that it will not to be affected either positively or negatively.

**Table 4.5: General perception on the impact of drilling operations in the area**

ValueLabel	Value	Frequency	Percent	Valid Percent	Cum Percent
Positive		39	78.00	78.00	78.00
Negative		10	20.00	20.00	98.00
Unaffected		1	2.00	2.00	100.00
Total		50	100.0	100.0	

**Fig 4.5: General perception on the impact of E-procurement in Nigeria and public sectors**



**4.2.2 Associated benefits of using e-Procurement system**

Exploratory factor analysis was done in table 4.6 and 4.7 below. 8 major benefits were identified in table 4.6 which will be derived in the use of e-procurement system in Nigeria. The increase in profit margin associated with e-procurement (16%), reduction in errors associated with paper-based methods (14%), reduction in the procurement cost (5%), reduction in time spent on procurement process (4%), enhanced level of efficiency in job delivery (11%), less labour intensive feature of e-Procurement (11%), effective communication between project team members (21%) and elimination of geographic barriers in the procurement process (18%) were all identified. Effective communication between project team members, elimination of geographic barriers in the procurement process, the increase in profit margin associated with e-procurement and reduction in errors associated with paper-

based methods were the most significant benefits that were identified. In addition, enhanced level of efficiency in job delivery and less labor intensive feature of e-Procurement were also significant benefits that were identified.

**Table 4.6: Associated benefits of using e-Procurement system.**

<i>Benefits of using e-Procurement</i>	<b>Value</b>	<b>Factor</b>	<b>Percentage</b>
The increase in profit margin associated with e-procurement	0.021	15.89	16%
Reduction in errors associated with paper-based methods	0.028	14.48	14%
Reduction in the procurement cost	0.053	5.06	5%
Reduction in time spent on procurement process	0.057	4.59	4%
Enhanced level of efficiency in job delivery	0.034	10.66	11%
Less labour intensive feature of e-Procurement	0.033	10.99	11%
Effective communication between project team members	0.015	20.57	21%
Elimination of geographic barriers in the procurement process	0.024	17.76	18%

#### **4.2.3 Factors affecting e-procurement in Nigeria.**

Table 4.7 identified the factors that is currently affecting the implementation of e-procurement in Nigeria today. 7 factors were identified from the responses. Availability of e-Procurement packages (8%), the cost of acquiring and operating the package (24%), extent to which e-procurement technologies and tools are easy to use (8%), the geographical spread of the software and network availability (15%), financial constraints (18%), availability of IT manpower (5%) and Political factors (22%) were all identified. Among them, the cost of acquiring and operating the package, Political factors, financial constraints and the geographical spread of the software and network availability were all significant factors affecting e-procurement in Nigeria.

**Table 4.7: Factors affecting e-procurement in Nigeria.**

<i>Factors affecting e-Procurement use</i>	<b>Value</b>	<b>Factor</b>	<b>Percentage</b>
Availability of e-Procurement packages	0.051	10.66	8%
The cost of acquiring and operating the package	0.016	20.57	24%
Extent to which e-procurement technologies and tools are easy to use	0.053	5.06	8%
The geographical spread of the software and network availability	0.042	10.99	15%
Financial constraints	0.036	14.48	18%
Availability of IT manpower	0.059	4.59	5%
Political factors	0.024	15.89	22%

#### **4.2.4 Ways challenges of public procurement can be enhanced for better e-implementation.**

Having identified challenges affecting public procurement in Nigeria, it is paramount to recommend strategies to help cope with these challenges and aid in better implementation of the e-procurement in Nigeria. Strengthening negotiations was recommended more by 32% of the respondents. Budget approval was also recommended by 24%. 18% chose recruiting future talent to help grow the ministry. However, 14% believes that establishing feedback mechanism will increase communication and aid in public procurement while 10% agreed that strategic sourcing of funds will go a long way. 2% finally agreed that creating a standard policy will solve most of the challenges in public procurement today.

Fig 4.8: Ways challenges of public procurement can be enhanced for better implementation

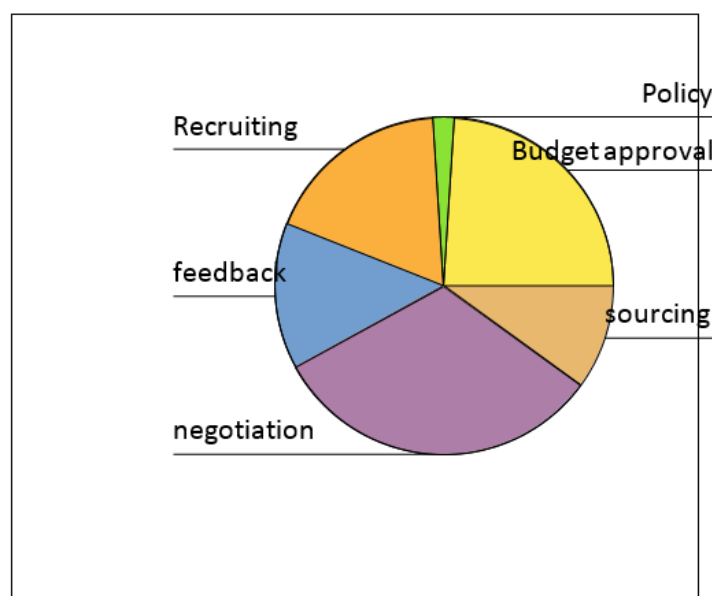


Table: 4.8: Ways challenges of public procurement can be enhanced for better implementation

ValueLabel	Value	Frequency	Percent	Valid Percent	Cum Percent
	Budgetapproval	12	24.00	24.00	24.00
	Policy Recruiting feedback	1	2.00	2.00	26.00
	negotiation.	9	18.00	18.00	44.00
	sourcing	7	14.00	14.00	58.00
		16	32.00	32.00	90.00
		5	10.00	10.00	100.00

### 4.3 Discussion

Since the advent of the Internet, the use of Internet-supported information and communication technologies (ICTs) has led to advancements and development of different sectors in the world. However, one aspect of this development that has shown great potential for improving the performance of other country's procurement industry with the use of electronic communications and transaction processes when buying supplies and services or conducting tendering for works, which is referred to as electronic (e-) Procurement. Therefore, the aim of this study is to ascertain the factors affecting the adoption of E-procurement in public sectors such as in health, construction, economy, and education sectors in Nigeria.

Table 4.1 showed the gender distribution of the respondents. It was observed that out of 50 respondents, the males formed the majority while those within the age range of 26-35 years formed 46% of the total respondents forming the majority. Table 4.3 shows the number of years each respondent has worked in the public sector. It was discovered that most of the respondents have worked for more than 2 years in the work. 38% of the respondents have worked for more than 20 years.

Table 4.5 shows the overall perception of the impact of E-procurement system in the public sector. 78% of the total respondents agreed that it will have a positive impact on the public sector and the country economy and infrastructure while 20% agreed that there is negative impact whereas only about 2% agreed that it will not be affected either positively or negatively. With this response, it is believed that the workers in procurement company in Nigeria also believed in the impact of e-procurement in the Nigerian public sector.

In table 4.6 and 4.7, exploratory factor analysis was done to analyses the impact of the identified variables in the study. Table 4.6 identified 8 major benefits that will be derived from the implementation of e-procurement in Nigeria. Among them, effective communication between project team members, elimination of geographic barriers in the procurement process, the increase in profit margin associated with e-procurement and reduction in errors associated with paper-based methods were the most significant benefits that were identified respectively. In addition, enhanced level of efficiency in job delivery and less labor-intensive feature of e-Procurement were also significant benefits that were identified with < 0.05 p-value. However, reduction in procurement cost and reduction in time spent on procurement were also identified but were not significant when compared to the other

factors (p value > 0.05). This finding is in collaboration with that of Ibe et al., (2020) who also stated that the above benefits will be derived from e-procurement in building procurement industry. According to them, the establishment of e procurement will go a long way in investigating the dimensions of the factors that influenced the decision by organizations in the NBI to adopt e-Procurement; and identifying the factors that contribute the most to explaining the actual use of e-Procurement by procurement organisations.

Table 4.7 identified 7 factors affecting the implementation of e-procurement in Nigeria. Among them, the cost of acquiring and operating the package, Political factors, financial constraints and the geographical spread of the software and network availability were all significant factors affecting e-procurement in Nigeria with p-value < 0.05 while availability of e-Procurement packages, extent to which e-procurement technologies and tools are easy to use and the availability of IT manpower were insignificant p-value > 0.05). This can be because of less influence of this factor in e-procurement. For instance, Nigeria has a lot of well-trained ICT manpower that can handle the sector and Nigeria can easily acquire the software once the money is there. This finding is in line with that of Aduwo et al., (2016) who stated that “although the uptake of e-Procurement technologies and processes by businesses and organizations has been very impressive in the developed countries, the same cannot be said in many developing countries like Nigeria where the uptake of e-Procurement is rather slow and low. This is because of many factors like Technical, infrastructure, political, social, and cultural issues; the lack of evidence of the benefits of e-Procurement in the building industry; and lack of financial ability to use e-Procurement in different organizations”

Having identified challenges affecting public procurement in Nigeria, it is paramount to recommend strategies to help cope with these challenges and aid in better implementation of the e-procurement in Nigeria. Strengthening negotiations was recommended more by 32% of the respondents. Budget approval was also recommended by 24%. 18% chose recruiting future talent to help grow the ministry. However, 14% believes that establishing feedback mechanism will increase communication and aid in public procurement while 10% agreed that strategic sourcing of funds will go a long way. 2% finally agreed that creating a standard policy will solve most of the challenges in public procurement today. This finding is also in line with that of Williams-Elegbe, (2018) who stated that public procurement is one area in which corruption manifests because of the sums of money involved; the asymmetry of information; and the bureaucratic nature of decision-making, which presents opportunities for abuse. Strengthening negotiations, adequate communication and adequate policy on public procurement use in Nigeria will therefore go a long way in enhancing e-procurement in Nigeria.

## **V. CONCLUSION AND RECOMMENDATIONS**

### **5.0 CONCLUSION**

Among the respondents, 46% were procurement officers or procurement specialists working in the public sector, 28% were finance officers, 16% were ICT administrators while 10% were Investigation officers. Thus, the professional background and skillsets of the respondents may also affect their reception of e-Procurement. 78% of the respondents agreed that it will have a positive impact on the public sector and the country's economy and infrastructure while 20% believe that there it will have negative impact. 2% agreed that it will not change things either positively or negatively.

### **5.1 CHALLENGES AND BENEFITS OF E-PROCUREMENT**

The challenges are:

- a. Strengthening negotiations was recommended by 32% of the respondents.
- b. Budget approval was also recommended by 24%.
- c. 18% identified recruiting future talent to help grow the departments.
- d. 14% believe that establishing feedback mechanism will increase communication and aid in public procurement.
- e. 10% agreed that strategic sourcing of funds is important.
- f. The remaining 2% agreed that creating a standard policy will solve most of the challenges in public procurement today.

Significant factors affecting e-Procurement in Nigeria are:

- g. Availability of e-Procurement packages
- h. The cost of acquiring and operating the package
- i. Extent to which e-Procurement technologies and tools are easy to use
- j. The geographical spread of the software and network availability
- k. Financial constraints
- l. Availability of IT manpower
- m. Political factors

The benefits are:

- i. Increase in profit margin.

- ii. Reduction in errors associated with paper-based methods.
- iii. Reduction in the procurement cost.
- iv. Reduction in time spent on procurement process.
- v. Enhanced level of efficiency in job delivery.
- vi. Less labour-intensive feature of e-Procurement.
- vii. Effective communication between project team members.
- viii. Elimination of geographic barriers in the procurement process.

## **5.2 GAPS IN KNOWLEDGE**

1. The uncertainty of the impact of e-Procurement system on staff employment and processes in the public sector may have led to the reluctance in its adoption.
2. This study was intended to fill the gap in knowledge in that area and to clarify that e-Procurement does not lead to layoff of staff and that its wide adoption will have a positive impact on the public sector and the country's economy and infrastructure.

## **5.3 CONCLUSION**

The study showed that there is no law requiring the adoption of e-Procurement in Nigeria. Several factors affect its implementation in the public sector in Nigeria. These factors range from age of the procurement officers, their gender, their length of service, their primary area of study etc. It was found that the older workforce did not take kindly to e-Procurement and that those who did not have good grasp of IT skills did not take kindly to it.

## **5.4 RECOMMENDATIONS**

For better procurement practice in the public sector in Nigeria culminating in the elimination of waste and ensuring the adoption of e-Procurement the study recommended as follows:

1. Adequate budget provision for acquisition of relevant e-Procurement equipment
2. Strategic recruitment of staff with IT skills to ensure favorable reception of e-Procurement
3. Establishment of feedback mechanism to increase communication and aid in public procurement
4. Creating a standard policy will solve most of the challenges in public procurement today.

## **REFERENCES**

- [1]. Bailey W .R. (2005). *Human Performance Engineering: Designing High Quality Performance, Professional User Interfaces for Computer Products and Systems* (5th ed) Prentice Hall, New York
- [2]. Callender, G. & Schapper, P. (2003). "Public Procurement Reform in Australia: A Federal-State Evaluation. International Research Study of Public Procurement." In *Proceedings of International Research Study of Public Procurement* (pp. 48-61), 10-12 April, Budapest, Hungary.
- [3]. Davila A., Gupta M. and Palmer R. (2003). Moving procurement systems to the internet: the adoption and use of e-procurement technology models. *European Management Journal* Vol. 21 No. 1 pp. 11-23
- [4]. Eadie R. Perera S. Heaney G. and Carlisle J. (2007). Drivers and Barriers to Public Sector e-procurement within Northern Ireland's Construction Industry, *ITcon Journal*, Vol. 12, pp. 103-120
- [5]. Egbu C., Vines M. and Tookey J. (2004). The role of knowledge management in e-procurement initiatives for construction organisations, *ARCOM Proceedings Twentieth Annual Conference 2004 Herriot Watt University, Scotland*, pp. 661-671.
- [6]. Gebauer J., Beam C. and Segev A. (1998). Impact of the internet on purchasing practices, *Acquisitions Review Quarterly* Vol. 5 No. 2 pp.167-184.
- [7]. Government of Kenya (2006) *Public Procurement and Disposal Regulation (2006)*. Legal Notice No. 51. Nairobi: Government Press.
- [8]. Hawking P., Stein A., Wyld D. and Forster S. (2004). E-procurement: is the ugly duckling actually a swan down under?, *Asia Pacific Journal of Marketing and Logistics* Vol. 16 No. 1. 1-26
- [9]. Heywood, J.B. (2002). *E-Procurement: Managing Successful e-Procurement Implementation*. Harlow,NJ: Financial Times - Prentice Hall.
- [10]. Jennings D. (2001). *Secure Trading, Supply Management*, pp.52-53.
- [11]. Kim J. and Shunk D. (2003). Matching indirect procurement process with different B2B e-procurement systems, *Computers in Industry* Vol. 53. 153-164.
- [12]. Minahan, T. and Degan, G. (2001). *Best practices in e-procurement*, Boston: Aberdeen group. The abridged report, available at [www.hedgehog.com/resources/e-ProcurementAbridged.pdf](http://www.hedgehog.com/resources/e-ProcurementAbridged.pdf). Downloaded on 20th September 2012
- [13]. Mose, P.N (2012). *An Assessment Of The Extent Of Compliance With Public Procurement And Disposal Act 2005 In Level 5 Hospitals In Kenya: A Study Of Kisii Level 5 Hospital*. Unpublished MBA Report, Egerton University, Kenya
- [14]. Rankin J., Chen Y. and Christian A. (2006). E-procurement in the Atlantic Canadian AEC industry. *ITcon* Vol. 11, Pp. 75-87
- [15]. Vaidya, K., Sajeev, A. S.M. and Callender, G (2006). Critical Factors That Influence E-Procurement Implementation Success In The Public Sector. *Journal Of Public Procurement*, Volume 6, Issues 1 & 3, pp. 70-99
- [16]. Wittig, W.A. (1998). Report of the Conference on Public Procurement Reform Conference in Africa, Côte d'Ivoire, 30 November-4 December 1998, International Trade Centre, Geneva.
- [17]. World Bank (1995). "Guidelines: Procurement under IBRD Loans and IDA Credits", World Bank, Washington, D.C.
- [18]. Ibem, Eziyi & Aduwo, Egidario & Adedeji, Afolabi & Oluwunmi, Adedamola & Tunji-Olayeni, Patience & Ayo-Vaughan, Emmanuel & Uwakonye, Obioha. (2020). Electronic (e-) Procurement Adoption and Users' Experience in the Nigerian Construction Sector. *International Journal of Construction Education and Research*. 17. 1-19. 10.1080/15578771.2020.1730527.

- [21]. Aduwo, Egidario & Ibem, Eziyi & Uwakonye, Obioha & Tunji-Olayeni, Patience & Ayo-Vuaghan, E.K.. (2016). Barriers to the uptake of E-procurement in the Nigerian building industry. 89. 115-129.
- [22]. Williams-Elegbe, S. (2018). Systemic corruption and public procurement in developing countries: are there any solutions? *Journal of Public Procurement*.
- [23]. Mujih D. (2010). *The observing quantitative research in education with SPSS*. SAGE publications. 2(2) pp.2-8.
- [24]. Murab, T. (2014). *Approach to quantitative research. Experimental research* 33(9): pp 333-455.
- [25]. Yin, R. K. (2009). *Case Study Research: Design and Methods*, 4<sup>th</sup> Ed. California: SAGE Publications.

**APPENDIX 1: Sample of Semi Structured Interview Guide**

**FEDERAL UNIVERSITY OF TECHNOLOGY  
PUBLIC PROCUREMENT RESEARCH CENTRE  
OWERRI, IMO STATE, NIGERIA**

27th May 2022

Dear Sir/Madam,

**RESEARCH QUESTIONNAIRE**

I am a student undertaking PGD research study titled: **FACTORS AFFECTING THE ADOPTION OF E-PROCUREMENT IN PUBLIC SECTOR IN NIGERIA.**

This survey intends to enhance the application of e-procurement in procurement planning in Public Procurement Entities in Nigeria.

The information you provide will be treated in the strictest confidence.

Thank you for your time and assistance.

Yours sincerely,

Peter Claver okoro

1. What academic qualification do you have?

.....

2. What professional qualification do you have?

.....

3. How many years of experience do you have in practicing procurement?

1 – 5yrs     6 – 10yrs     11 – 15yrs     16 – 20yrs     21 yrs or over

4. The following are challenges identified in the application of e-procurement in procurement planning. Could you please share your opinion on them?

i) Small/Low procurement thresholds give room for splitting of procurements into smaller components to avert the threshold of approval.

ii) Unfamiliarity with regulations; for example, a lack of understanding of Public Procurement Act, Public Procurement Procedures Manual and other Public Procurement Guidelines as provided by the Bureau of Public Procurement.

iii) Corrupt practices; for example, budgets could be set artificially high so that excess allocations can be misapplied and slanting specification.

iv) Absence of functional and effective procurement units.

v) Inadequate Qualified Personnel/Professional Workforce.

vi) Influence on the choice of procurement method, for example, influence from political leaders, management, and suppliers.

vii) Poor coordination between departments; thus, receiving accurate, relevant, and up-to date information in a timely manner.

viii) Nonparticipation of key personnel in procurement planning.

ix) Political Influence

x) Poor monitoring by oversight agencies

**APPENDIX 2: Summary of Responses**

Stages Respondents	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5	Respondent 6
<b>Period of Commencing Procurement Planning</b>	Our procurement planning begins in the month of January.	The whole process starts from the month of June. Where we do the mid-year review of the previous procurement. After the review, there is a budget committee that is formed.	We send circulars around to the user units in October and by the end of November we send the procurement plan to the Entity Tender Committee.	Preparation of annual procurement plans begin in the month of October.	We begin preparation of the procurement plan in the month of November.	The procurement planning starts in the month of September and we complete it by the end of November. Before the process begins we send letters to departments to submit their inputs.
<b>Need Identification</b>	Departments first put their needs together and then the send it to the procurement unit.	The various heads of departments preparing their budgets to appear before the budget committee. The budget committee will then have a discussion of the needs that the heads of departments have stated.	The planning unit in consultation with the communities prepare an action plan for the assembly which contains all the needs of the communities.	The Assembly prepares a medium term development plan which spans a period of 4-5 years. It's the annual term plan that contains all the procurement need that would be procured in a particular financial year.	We have a planning unit which go into the communities and communicate with the assembly members who represent the communities to give them their priority projects that they need in the various	From the annual action plan we identify all the procurement needs and then we classify them into goods works and services
<b>Budgeting and Estimating</b>	The budget office then prepares the budget for the things that are to be procured.	After the review, there is a budget committee that is formed. The various heads of departments preparing their budgets to appear before the budget committee. The budget committee will then have a discussion of the needs that the heads of departments have stated.	The planning officers will plan the action plan, the budget officers will also prepare the budget and other functionary units like the works department.	Procurement unit prepares the estimates for procurement needs in conjunction with the user departments. The budget allocation is then forwarded to the general assembly or authority meeting for discussion and approval.	Departments first send their needs to the budget office to be included in the budget. Estimating is done by the procurement unit.	Need items are extracted from the action plan.
<b>Aggregation/Consolidation</b>	The procurement unit puts all the need items together.	Aggregation is where we put together like items into goods works and services.	Aggregation is where we package the projects into lots or we classify the needs/projects that are of similar nature that will need to be procured at the same time.	We group like items of the procurements from user departments.	After all the needs have been forwarded to the procurement unit, we classify the similar items into goods, works and services.	From the annual action plan we identify all the procurement needs and then we classify them into goods works and services to achieve economies of scale.



*Factors Affecting the Adoption of E-Procurement in Public Sector in Nigeria*

<b>Choice of Procurement Method</b>	The cost of the item of projects is what shows the procurement method to be used.	The method of procurement which we assign to each procurement is based on the amount of that procurement and taking a look at the threshold in the Act we choose the right method.	As the law demand every procurement need with its value, and the method to be used for it.	The method of procurement is dependent of the value of the procurement need. And also the circumstance giving rise to that procurement.	The method of procurement which we assign to each procurement is based on the amount of that procurement and taking a look at the threshold in the Act we choose the right method.	Every procurement method with the related amount with which procurements are marched against.
<b>Procurement Timelines</b>	We consider the time the procurement item will be needed by the users and then we plan for it.	The date at which the item will be need is used as a basis to calculate the time backwards.	The time lines that we use are as set out in the manual. So we follow exactly what is in the manual.	Aside the time the item would be needed. The times set out in the manual is used as a basis.	Procurement timelines are the times that we assign to the whole process.	We use what is stated in the manual.
<b>Approval Authority for Procurement</b>	We use the Act, what the act says, that is depending	In the same way the estimated cost tells what the	Every estimated value of procurement with	The amount that a project will cost tells the approval	The choice of the approval authority is always in	It depends on the amount we are looking at with

**APPENDIX 3: Summary of Reponses on Challenges**

Challenges / Respondents	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5	Respondent 6
<b>Small or Low Procurement Thresholds</b>	Absolutely, goods for instance has a small threshold which must be revised.	I agree that the low threshold make room for splitting of procurements	This is not absolutely true, because it rarely happens in our case.	Many times the amount involved compared to the amount to be incurred in advertisement makes room for splitting of procurements.	Yes, of the thresholds are small so there is the tendency to split procurements.	That is perfectly true, the low level of the threshold gives room for splitting of procurements.
<b>Familiarity with Regulations</b>	Yes we are familiar with rules guiding procurement planning.	For us here we have full knowledge of what we do here regarding procurement planning.	For familiarity, I would say to some extent we have it, but other departments that we work with.	Our officers are familiar with the regulations and how they should be applied, but rather is management that has difficulty with familiarity.	Yes we are familiar with what the Act requires that we do.	For people who do procurement planning we understand and are familiar bur it's rather the user departments that are not all that familiar with the Act and manual.
<b>Setting High Budgets</b>	Yes sometime there is over budgeting, where budgets could be	I agree with over budgeting, where budgets could be set artificially	This seldom happen. Even though we have interference from politicians and	Management many times play a role in setting high budgets.	Not really this doesn't happen here.	Sometimes budgets could be set high, but the reason is as a result of payments

*Factors Affecting the Adoption of E-Procurement in Public Sector in Nigeria*

	set artificially high	high.	management.			that delay and the influence of leaders
Absence of Functional Procurement Units	We have a procurement unit in our organisation.	We have function procurement units.	For our establishment we have functional procurement unit	Our procurement unit is functional.	Contrarily, there is a procurement unit in the assembly.	No there is a functional procurement unit.
Inadequate Qualified Personnel/Professional Workforce	We have qualified officers in these unit.	No, there is a lack of competent professional workforce, in our own case here we have the workforce to facilitate procurement planning.	Our officers are qualified for the work they do in this unit.	Yes we do, we also have what is required academically.	I would say we have but not enough currently.	I have a BSc degree in procurement and supply chain. So in our institution here I would say that there is the competent professional workforce.
Loopholes in Legislations	Not really so much at this time.	We rather term loop holes in legislations as lack of adequate regulation regarding the procurement process. For instance clear procedures for procurement	As for the law there are somethings that need to be amended.	A more detailed guideline on how planning should be carried out will be of good help to the work we do.”	There are things that required to be relooked at again in the law.	As for the law its states everything, the rules are there. The problem is not with the Act 663 but with other statutory provisions regarding funding.

**n**

Influence on the Choice of Procurement Method	Public projects many times face such challenges.	Yes, there exist influence on the choice of procurement method. There is that influence on planning from suppliers, management and political leaders.”	As the law demands every procurement need with its value and the method to be used for it.	There is influence from politicians, suppliers and management. Management may ask that procurement should be divided into items.	This happens and you know it's caused by others.	As for this one you cannot avoid. There are instances where projects are given to particular people which conflict the provisions of the law.
Poor Records Management	We have don't have so much problem with that.	Because of the fact that we put down good records of our procurement process we do not have problems with recording.	There is, but it's not a major problem	There are no better filing system, because of the cost involved to prepare or create a good filing system.	This is a problem that we face currently.	As for this one I really agree. Sometimes in our institution here, you need a document of complete a task and you just can't seem to get.
Influence of Economic and Market Conditions	In every procurement the market condition has an effect on it.	Yes, there is influence from economic and market conditions.	This challenge you know is in every systems.	The changes of prices in the market have an influence on the procurement plan.	Changes in the markets affects planning in addition to tight budgets of the assembly.	One thing is that the PPA website has a database of prices for some procurement items.