

**IMPACT OF PUBLIC PROCUREMENT SYSTEM ON PUBLIC BUILDING  
PROJECTS IN OSUN STATE**

**BY**

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**2016/1/64072TI**

**DEPARTMENT OF INDUSTRIAL AND TECHNOLOGY EDUCATION  
FEDERAL UNIVERSITY OF TECHNOLOGY MINNA, NIGER STATE**

**APRIL 2023**

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**2016/1/64072TI**

**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF  
INDUSTRIAL AND TECHNOLOGY EDUCATION, SCHOOL OF SCIENCE AND  
TECHNOLOGY EDUCATION**

**APRIL 2023**

## **CERTIFICATION**

I ABE, Isaac Ifeoluwa, Matric No. 2016/1/64072TI an undergraduate of the department of industrial and technology education, certify that the work embodied in this project is original and has not been submitted in part or full for any other degree or diploma of this or any other institution

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\_\_\_\_\_

Signature and Date

## CERTIFICATION

This project has been read and approved as meeting the requirement for the award of B.Tech degree in Industrial and Technology Education, school of science and technology education, Federal University of Technology, Minna.

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## **DEDICATION**

This research is dedicated to God Almighty for all his mercies and protection toward me and also to Mr. N. A. Abe.

## **ACKNOWLEDGEMENTS**

First and foremost, my profound gratitude goes to Almighty Allah for his grateful mercy upon my life throughout the pursuit of this program. My most sincere gratitude goes to my project supervisor, in person of Dr. A.B Kagara who out his tight schedule supervised this work. His immeasurable assistance, positive criticism source of inspiration, useful suggestion, time, knowledge and guidance on this work proved very helpful in the process of writing this research. I am sincerely grateful. I acknowledge Prof. T.M Saba, the Head of Department as well as the project coordinator Dr. Hassan A.M and the entire lecturers of the department for guidance and knowledge they have all impact throughout my stay in the school. May God Almighty bless you all. My sincere gratitude goes to my lovely mother Mrs. Mary Abe for all they have done on me. I say a very big thank you to all my friends, am sincerely grateful to you all, God bless you all.

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## **ABSTRACT**

This research was designed to study the impact of Public Procurement System on Public Building Projects in Osun State. Three research question were answered and two hypothesis were used to guide the study. A structured questionnaire which was developed by the research and was used for data collection. The structured questionnaire was validated by three (3) experts from the department of industrial and technology education. The validated instrument was prepared for a population of study is sixty (60) which consist of forty-five (45) public buildings and fifteen (15) procurements in some selected public building projects in Osun State. The instrument was administered to the respondent with the help of three (3) research assistant. The research questions answers were analyzed using frequency counts, mean and standard deviation while the t-test used to analyze the hypothesis at 0.05 level of significance. Findings revealed that all the public building and procurement in public building projects all agreed to the public procurement success factors that have significant influence on public building construction performance in Osun State. Findings of the study also revealed that the public buildings and procurement all agreed to the extent to which due process is observe and the impact of public procurement system on public building project in Osun State. The study recommends that the adopt and implement e-tendering/bidding. This will ensure that the key public procurement success factors, transparency, cost-effectiveness, competition, fairness, & equity are adhered to costs benefit analysis on public projects to be undertaken before construction, with stakeholders/community participation. The study also recommended that the public procurement should be more transparent with possibility of meeting minutes being made available to the public as well as video archives, proper documentation at all stages to enhance monitoring, evaluation and audit. The study also recommends E-Tendering, contractor selection and rating system to be introduced and implemented. Improve communication and monitoring by adopting ICT.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Public procurement system has been utilised as an important tool for achieving economic, social, and other objectives (Arrowsmith, 2018). Public procurement system is broadly defined as the purchasing, hiring or obtaining by other contractual means of goods, construction works, and services by the public sector (Kipchilat, 2006). The procurement of construction project is vast in scope because it involves the gathering and organizing of myriads of separate individuals, firms and companies to design manage and build construction products such as houses, office buildings, shopping complex, roads, bridges etc. for specific clients or “customers”.

Masterman, described project procurement as the organizational structure needed to design and build construction projects for a specific client. It is in a sense very true because the process of “obtaining” a building by a client involves a group of people who are brought together and organized systematically in term of their roles, duties, responsibilities and interrelationship between them. Apart from the traditional approach, there are now other “fast-tracking” or innovative procurement systems used by the construction industry worldwide. The different procurement systems differ from each other in term of allocation of responsibilities, activities sequencing, process and procedure and organizational approach in project delivery.

These differences have invariably affected the project performance. Project performance has been defined as “the degree of achievement of certain effort or undertaking”. It relates to the prescribed goals and objectives which form the project parameters. From project management perspective, it is all about meeting or exceeding stake holders’ needs and expectations from a project. It invariably involves placing consideration on three major project elements i.e. time, cost and quality.

Public procurement has been identified as the government activity most vulnerable to corruption. As a major interface between the public and the private sector, public procurement provides multiple opportunities for both public and private sectors to divert public funds for private gain. For example bribery by international firms in OECD countries is more pervasive in public than in utilities, taxation, judiciary and state capture (OECD 2007). The challenge of ensuring integrity in the public procurement processes is therefore not a problem peculiar to Nigeria or the developing countries alone. The lack of open processes and procedures and mismanagement of resource in the award of contracts in the government circle may have necessitated calls by international organizations for governments to pay greater attention to the public procurement process to ensure that award of contracts and other procurement matters are handled professionally, in compliance to acceptable global standards. The establishment of the organization of public procurement ensures compliance to enthrone transparency, accountability, and value for money in the procurement of goods, works and services, both for project planning and implementation. The procurement Act stipulates the punitive measures when are aimed at discouraging the arbitrary award of contract and the wanton abandonment of government projects and corrupt

activities of some government official. Due process in public procurement and award of contract, among other benefits, accelerate infrastructural development in the country by the elimination of inflation of contract cost and abandonment of project which would launch the country into the comity of progressive nations. Public procurement reforms is necessitated in Nigeria by transparency and accountability related issues due to rampant public procurement fraudulent practice in addition to conflict of interest, and this has remained the sole reason for reforming public procurement processes in most of the countries that passed through the public procurement transformation process (Jibrin Ejura, & Augustine 2014) The aim is to uplift the status of the country economically by reducing the high level of poor governance, public procurement irregularities fraud and corrupt related practices within the public sector generally (Shwarka & Anigbogu 2012). The setup of the Bureau of public procurement and the enactment of public procurement Act 2007 were necessary as there was the need to make public procurement processes more professional, efficient and effective.

Another study by Yidana and Osei-Tutu (2020) explored the impact of public procurement systems on the delivery of public building projects in Ghana. The study found that the lack of transparency and accountability in procurement processes had a negative impact on the delivery of public building projects. The study also highlighted the need for effective monitoring and evaluation systems to ensure the successful implementation of public building projects. A study by Al-Hammad and Al-Rousan (2019) investigated the impact of procurement systems on the performance of public building projects in Jordan. The study found that the use of competitive tendering systems improved the efficiency of procurement processes and led to better value for money in public building projects. However, the study

also identified the need for improvements in procurement regulations and guidelines to ensure the successful implementation of procurement systems in Jordan. The impact of public procurement systems on public building projects has been widely studied by researchers. The studies reviewed in this paper highlight the need for effective procurement regulations and guidelines, transparency and accountability in procurement processes, and monitoring and evaluation systems to ensure the successful implementation of public building projects.

Public procurement refers to the process by which governments or public bodies purchase goods, services, or works from private sector companies. In the context of public building projects, public procurement plays a critical role in ensuring that public funds are used efficiently and effectively to deliver high-quality infrastructure. The impact of public procurement systems on public building projects has been the subject of extensive research in recent years. One study by Kamaruzzaman et al. (2018) investigated the impact of procurement methods on the quality of public building projects in Malaysia. The study found that the use of open tendering, selective tendering, and design and build procurement methods led to higher levels of quality in public building projects. However, the study also noted that the use of procurement methods that favored price over quality, such as lowest price tendering, led to lower quality outcomes.

Another study by Kuye and Oluwunmi (2018) explored the impact of procurement methods on cost overruns in public building projects in Nigeria. The study found that the use of competitive bidding and negotiated procurement methods led to lower levels of cost overruns, while the use of sole sourcing and direct procurement methods led to higher levels

of cost overruns. A study by Nkado and Oluwole (2019) investigated the impact of procurement regulations on the performance of public building projects in Nigeria. The study found that the lack of clear procurement regulations and guidelines led to inefficiencies in procurement processes, which in turn led to delays, cost overruns, and poor quality outcomes in public building projects.

However, it's a complex system with a set of rules that guide governments purchasing of construction works and services. Indeed, governments have used public procurement to meet development objectives such as the provision of public buildings and other services (Rege, 2003 as cited in Mutava, 2012). In Nigeria, public procurement system accounts for 80% of its budget expenditure (Aketch, 2005). Public procurement plays a critical role in the Nigerian economy and is an important factor in economic growth (Kadima *et al.*, 2013). The Nigerian economy at the moment is experiencing growth with the public as well as the private sectors being engaged in numerous development building and construction projects with expected socio-economic and governance impacts (Abiodun., 2014). Public building works completed in main towns increased from 86.9% in 2012 to 103.7% in 2013 (Abiodun, 2014). Since the public procurement of projects contributes a significant proportion of a country's economic growth in terms of jobs creation, capital formation and provision of infrastructure services, non-performance in terms of cost, time and quality to completion results in delayed economic growth (Baradyna, 2008). Nigerian procurement system continuous transformation is expected to address inefficiency in public building projects delivery among others in the country but this has not been the case (Juma, 2010). Moreover, public procurement is full of evidence of poor project procurement practices, (Owegi & Aligila, 2006) as cited in Langat

(2012). Munano, (2012) indicates that, only 34.9% of contracted public building projects were completed in the financial year 2007 to 2011, the rest 65.1% have stalled or are experiencing delays, and cost overrun. Alfred (2008) affirmed that public procurement of works suffers from irregularities in the selection process of contractor that could be linked to, stalled projects, delay in project completion, cost overrun, and poor quality of work.

Consequences of this underperformance have attributed to delay in project completion, cost overrun and poor quality. It's therefore worth noting that, contract performance can be achieved by identifying public procurement-related factors and describing the mat early stages of project procurement (pre-tender/contract award process) thus creating a conducive performance during project implementation as predictors of contract success.

## **1.2 Statement of Problem**

The adoption of Public Procurement Act (PPA) of 2007 introduced procedures for public procurement system to allow for efficient procurement of building works. It additionally aimed at strengthening the procurement process in order to achieve: transparency, cost effectiveness, competitiveness, fairness and equity with primary focus to support projects delivery on budget, time schedule, required quality, and to client satisfaction. Despite the enactment of the Public Procurement Act, 2007 the building projects performances are replete with: delay in project completion, cost overrun, and poor quality of work as established by various studies (Munano 2012; Langat, 2012, Alfred 2008; Büchner, Freytag, González, & Güth, 2008; Owegi and Aligila 2006). Munano, (2012) affirmed that, only 34.9% of contracted public building projects were completed in the financial year 2007 to



2011, the rest 65.1% have stalled or are experiencing delays, cost overrun and a number of these projects may be linked to irregularities in contractor selection. Study commissioned by Public Procurement and Oversight Authority (PPOA), it was established that contract management of projects was weak, providing multiple opportunities for transgression in contract implementation (Organisation of Economic Co-operation and Development, 2007). Further, the legal framework and procedures that support success performance of project during implementation were not adhered to, thereby affecting and influencing contract performance (BPP, Annual Reports and Accounts, 2010).

The public procurement practice and system have been acclaimed, based on empirical evidence, as the best means of guaranteeing the provision of public goods for the citizen and public expenditure management. The Nigeria public procurement practice before the enactment of the public procurement ACT 2007 had been known to be unprofessional, inefficient and ineffective; hence, what is the impact of public procurement system on public building projects in Osun State, Nigeria?.

### **1.3 Purpose of the Study**

The main purpose of the study is to determine the impact of public procurement system on public building projects in Osun State. The specific objectives of the study are;

1. To ascertain the public procurement success factors that have significant influence on public building project in Osun State.

2. To ascertain the extent to which due process is observe on public building project in Osun State.
3. To examine the impact of public procurement system on public building in Osun State.

#### **1.4 Significance of the Study**

The findings of the study will be of benefit to procurement system, construction industry. This study will provide an effective and efficient public procurement system is important in evaluating the performance of government. Also this will help because deficiencies in procurement system contributed to huge losses in public procurement. For instance, the deficiencies led to poor public building projects and other physical infrastructure.

The findings of this study will contribute valuable knowledge to Construction industry policy makers, the government especially the procuring entities may use the study to develop or improve their policy on building project procurement; improve contractor selection and; other researchers will use the same in future research for literature review and for further studies in Nigeria.

**Also, the findings of this study will improve service delivery generally in the public sector through focusing on principles and procedures in procurement that would place the country firmly on the path of economic growth, in the public building sector, the reform is expected to promote a suitable built environment through the application of competition in tendering, effective planning and budgeting for projects and the**

**promotion of global best practices and ethical standards in order to achieve value for money on public building projects.**

### **1.5 Scope of the Study**

The study is delimited to the impact of public procurement system on public building projects in Osun State. The study hope to determine the public procurements success factor that have significant influence on public building project, the extent to which due process is observe on public project, the impact of public procurement system on public building in Osun State.

### **1.6 Research Questions**

The following research questions were used to guide the study;

- i. What are the public procurement success factors that have significant influence on public building project in Osun State?
- ii. What are the extent to which due process is observe on public building project in Osun State?
- iii. What are the impact of public procurement system on public building in Osun State?

### **1.7 Hypotheses**

**The following hypothesis were formulated and tested at 0.05 level of significance.**

**H<sub>01</sub>:** There will be no significance difference in the mean response between public building and procurement on the public procurement success factors that influence on public building construction performance in Osun State.

**H<sub>02</sub>:** There will be no significance difference in the mean response between public building and procurement on the impact of public procurement system on public building in Osun State.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Public Procurement System**

##### **2.2.1 Definition**

Public Procurement system is broadly defined as the purchasing, hiring or obtaining by other contractual means of goods, construction works, and services by the public sector (World Bank 2003 as quoted by Kipchilat, 2006). The public procurement of construction projects

is characterised with a process flow starting with procurement planning and proceeding in sequence to project design, advertising, invitation to bid, prequalification, bid evaluation (broken down further into technical and financial evaluation), post-qualification, contract award and contract implementation (Büchner, Freytag, González & Güth, 2008).

However, it's a complex system with a set of rules that guide governments purchasing of construction works and services. Indeed, it is an activity of all states and is done with public money to benefit the public. Goods, works and services so procured are generally provided by private enterprise (Stephanus, 2009). However, procurement process extends to ultimate disposal/decommissioning of property at the end of its useful life(Water, 2004). Therefore, for the purpose of this study the project procurement covers up to project closure.

### **2.2.2 Public Procurement Legal Framework**

Public procurement system has grown especially in the last decade. Stephanus (2009) argues that, Worldwide this growth has become a very important socio-economic factor and has been described as a procurement revolution. Many countries have adopted a number of regional and international agreements designed to eliminate discrimination against foreign products, construction works, and suppliers in procurement. The most important of these agreements is the World Trade Organisation (WTO). These developments have been supported by the adoption of United Nations Commission on International Trade Law (UNCITRAL) of a Model Law on Procurement of Goods, Construction and Services

(UNCITRAL, 1994).

The Model Law has become an international benchmark in public procurement law reform (Garcia, 2009). Enacting states are not required to inform UNCITRAL when they adopt the Model Law as it is used for local legislation in several states that include developed to developing countries, such as Nigeria, Kenya, Albania, Azerbaijani, Croatia, Estonia, Gambia, Kazakhstan, Poland, Romania, and Tanzania. The Model Law is a suggested text for legislators to perhaps use or tailor to their own local procurement legislation, not a binding prescriptive text. Legislators are free to amend various provisions or adopt them as a whole (Garcia, 2009). The objectives of this Law according to this Garcia (2009) are to maximize competition, fair treatment to contractors bidding to government work, enhance transparency, cost effectiveness in procurement and curb abuses. Nicholus, (2010) concurs with Garcia on the objectives of the public procurement model law through his six main principle factors that are set out in UNCITRAL preamble namely: promoting competition among suppliers and contractors for the supply of goods, or services to be procured; providing for the fair and equitable treatment of all suppliers and contractors, transparency in the procedures relating to procurement, promoting the integrity, fairness, public confidence in the procurement process and; cost effectiveness in procurement. Adopting provisions based on the Model law can also help states accede to international trade agreements for opening up procurement (Nicholus 2010).

In the European Union (EU) for example, public procurement legal framework set out the rules under which contracts must be awarded. It has its roots in principles set out in the Treaty

of Rome of 1957 (Mathews, 2010, 2012). Under this treaty primary provisions as well as secondary provisions (directives and regulations) rule public procurement. According to EU rules, public sector procurement must follow transparent open procedures ensure fair conditions of competition for suppliers (Guidi, 2010).

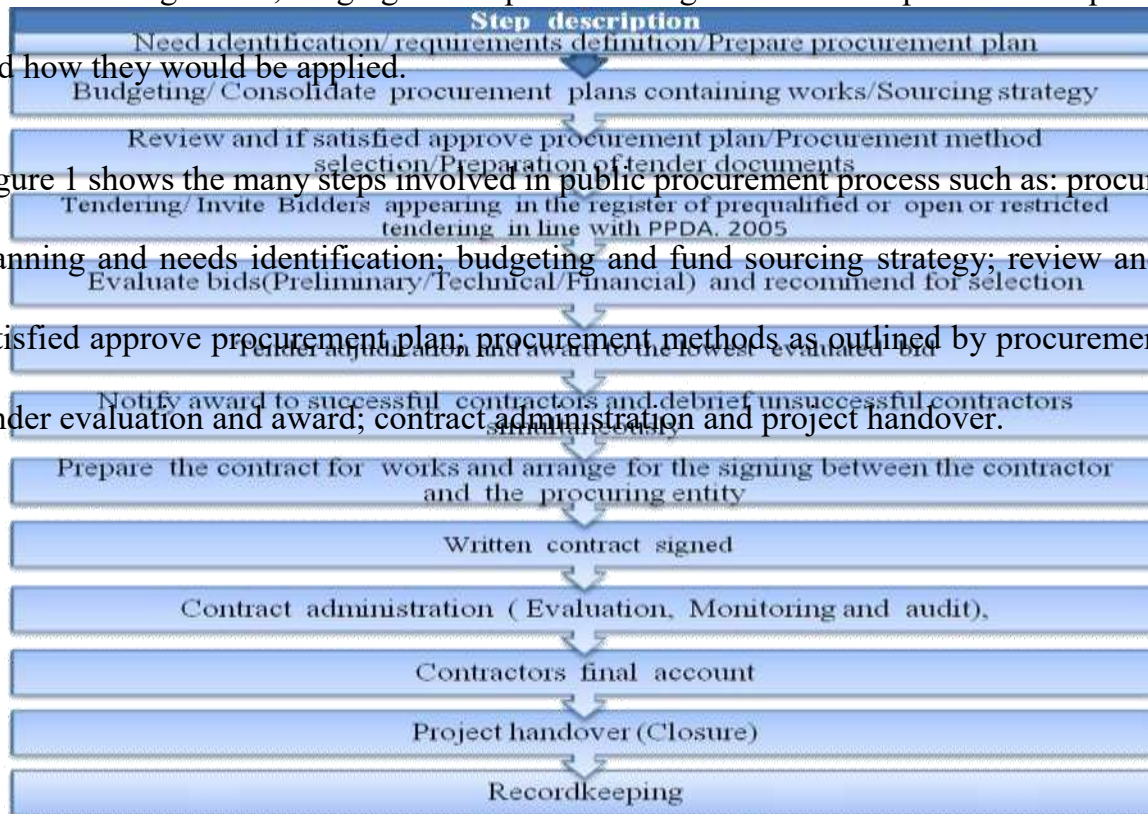
Ghana like many other developing countries has problems in her public procurement system (Anvuur, 2006). Huge and unsustainable foreign debt, excessive budget deficits, huge contractual payment arrears, poor construction performance, corruption, and pressure from international financial institutions are major problems that have forced the government to commit to a reform of public procurement system. This culminated in the passing of the Public Procurement Act, 2003(Act 663) (Anvuur, 2006). Similarly, Nigeria followed a World Bank Country Procurement Assessment Report (CPAR) conducted in 1999. The report established the link between the weak public procurement procedures and corruption. The report established that the weak public procurement system had far reaching negative consequences' on national development especially in the area of public construction projects in Nigeria. Following this, there was a growing public demand that the reforms are sustained and institutionalized with legal backing. Public Procurement Bill was there after enacted in to law in 2007(Nongo, 2012).

## **2.2 Public Procurement Process**

The enactment of the PPDAct, 2005, Public Procurement Regulations 2006, has put in place a sound and comprehensive legal framework for public construction procurement process with clear hierarchical distinction. The act, clearly establishes the procurement methods for

public building works, ranging from open tendering to alternative procurement procedures and how they would be applied.

Figure 1 shows the many steps involved in public procurement process such as: procurement planning and needs identification; budgeting and fund sourcing strategy; review and once satisfied approve procurement plan; procurement methods as outlined by procurement law; tender evaluation and award; contract administration and project handover.



**Figure2: 1: Steps in Public Procurement Process**



**Source:** Derived from PPOA Procurement Manual for works (2009) and Mutava (2012)

### **2.3 Institutional Framework**

The Legal framework established Public Procurement Oversight Authority (PPOA), and the Board of the Authority. PPOA has clear responsibilities, which include ensuring that procurement procedures for building project procurement are complied with and assisting in implementation and operation of the procurement system.

The current legal framework provides for a fully decentralized procurement process, leaving the full responsibility of undertaking procurement unit at the level of the individual procuring entities. This decentralization of decision-making authority represents a milestone in the reform process towards a sound and efficient procurement system, and hence a key asset to Nigeria procurement system. All public building projects procurement processes are handled at public institutions level (WB, 2007). Control mechanisms, including an effective control and audit system, an efficient appeals mechanism, in case of review of building projects contract award. The Appeals Review Board (ARB) constitutes the first avenue of complaints, and the PPDA provides for ARB decisions which are based on information relevant to the case, which is balanced and unbiased and can be subjected to judicial review. Transparency of public procurement system relies on a number of control mechanisms, including an efficient appeals mechanism (ARB) and an effective control and audit system (PPOA, 2007).

### **2.4 Social and Economic Responsibility of Public Procurement**

Public procurement accounts for a significant percentage of GDP and has a direct impact on economy. According to estimations drawing from National Account Data, governments in

OECD member countries spend an average of twelve percent of their GDP on public procurement (excluding procurement state-owned utilities). For instance, the National Accounts Data for 2008 showed that, the Netherlands, the Czech Republic, and Iceland spent over fifteen percent of their GDP by way of public procurement transactions, which are the largest shares amongst OECD countries. Furthermore, public procurement is also a significant activity in the developing world with a study of 106 developing countries finding that the purchases of their governments accounted for approximately 5.1 percent of their combined output (Evenett & Hoekman, 2005). From development point of view, public procurement policies are significant. Reducing poverty and attaining infrastructure, health, education, and other objectives among the citizenry requires that the limited public funds available for public procurement of goods, services and works are properly managed. The government procurement system is part of conversion process, from the collection of funds to the successful implementation of projects (Hui, Othman, Normah, Rahman, & Haron, 2011 (Hui *et al.*, 2011). Kipchilat (2006) quoting a Comesa report (2004), noted that procurement absorbs 60% of government expenditure and this means that the accountability at all times is important. The procurement process has the potential to deliver very significant public value payoffs to community. They also contend that the procurement of construction projects in the forms of office, hospitals, schools, and courthouses enables government to deliver services in the areas of services, health, education, and justice. The enormous amounts of money involved in government procurement and the fact that the money comes from the public demands accountability and transparency, which are not only national issues, but are also common issues (Hui *et al.*, 2011). Generally, the efficient, effective and professional

application of public procurement law can contribute towards sound management of public expenditure (Hunja, 2003).

In Nigeria for instance, public procurement accounts for 60% of its budget expenditure (Aketch, 2005). The total value of public procurement in Central Government is currently estimated at 10% of the Gross Domestic Product (Juma, 2010). The Nigeria economy at the moment is experiencing growth with the public as well as the private sectors being engaged in numerous development projects with expected socio-economic and governance impacts. The driving philosophy behind this buoyed economic upturn is the Vision 2030, which on its own has enlisted over 120 flagship projects in order to put the country in a new socio-economic and political pedestal. Therefore, there is need for the various players involved in project development and implementation to enhance the quality of their capacity. This enhancement is reflected in the quality of construction projects and efficiency of implementation.

Public procurement system is therefore fundamental to successful performance construction project during implementation. Actually, public procurement has come to play a major role in making the society better, and thus, there has been much research in public procurement and its efficient operations. Again, many governments use public procurement to support the development of domestic industries, overcome regional economic imbalances, and support minority or disadvantaged. Evidence shows that an effective procurement system could save government approximately 25% of its expenditure (TI, 2014). Further, public procurement has important economic and social implications, ensuring that the process is economical and

efficient. This requires that the whole process is well understood by all the actors (the government, the procuring entities, contractors and suppliers) and the other stakeholders including professional association, academic institutions and the public.

Moreover, this calls for developing countries to put in place appropriate social-economic and political environments characterized by bourgeois democracy, a strong civil society, and public transparency and accountability, for public procurement to work. The process so far is still shrouded with secrecies, inefficiencies, corruption and undercutting resulting to significant waste of resources (Aketch, 2005).

## **2.5 Effect and outcome on performance in public procurement system**

Public procurement system represents a major share of any country's GDP and public expenditure budget. According to Mahmood (2010), public procurement represents 18.42% of the World GDP. These levels of expenditure alone provide sound reasons for analyzing effect and outcome on performance of public procurement system. The overriding objective of a state's public procurement system is to deliver efficiency and "value for money" in public use of public fund (OECD, 2011). Performance in public procurement system is about seeking to answer the fundamental question of whether the procurement system delivers in accordance with the main objectives set.

The effect and outcome on performance in public procurement systems refer to the impact of different factors on the effectiveness and efficiency of procurement processes in government organizations. Studies have shown that several factors can affect the performance of public procurement systems. For example, the use of competitive bidding and the establishment of

clear evaluation criteria have been found to lead to better performance in public procurement (Mwenda et al., 2019). Transparency in procurement processes has also been found to improve performance by reducing corruption and increasing competition (Acar & Acar, 2017).

On the other hand, corruption has been found to have a negative impact on performance in public procurement by reducing the quality of procurement outcomes, raising costs, and reducing trust in government institutions (Chowdhury & Kirkpatrick, 2017). The use of technology in public procurement, such as e-procurement systems, has also been found to improve performance by increasing transparency and reducing corruption (Song et al., 2020).

### **2.5.1 Factors influencing performance**

Procurement is a process that usually starts long before the start of the construction process and ends, with project completion or project closeout, operation and maintenance (Mubarak, 2010). The procurement team must work in close coordination with the project management team as a whole. Furthermore, the Procurement Manager works independent of the Construction Project Manager (Mubarak, 2010). The public procurement system is built on four pillars-procurement laws and regulations, procurement world force, procurement process and methods and procurement structure. This system is mostly determined by the government and influenced by its economic, cultural, legal, political and social environment (Thai, 2009). Although procurement procedures need to be tailored to enhance the fulfillment of different project performance objectives (Wardani, Messner, & Horman, 2006), clients

tend to choose those procurement procedures that they have a good knowledge of and have a habit of using it regardless of any differences between projects (Love, Skitmore, & Earl, 1998). For a new procurement procedure to be implemented, clients need to feel confident on how to use it and have positive attitude towards its effects on outcome (Tysseland, 2008). However, Eriksson and Westerberg (2010) indicated that, procurement procedure (tendering, bid evaluation, subcontractor selection, and contractor self-control) generally has a positive influence on project performance (cost, time, and quality).

In Nigeria, conflict of interest, bribery, embezzlement, kicks backs, tender manipulation and fraud are observed corrupt practices in the infrastructure projects delivery and procurement system, which have seen the suspension of cabinet Secretaries, Governors, and Parastatals Executive Officers (Aketch, 2005; PPOA, 2007). The severity of corruption practices has intensified the search for more innovative means of delivering infrastructure projects that will achieve value for money. To address these challenges it would require the constitution of sound public procurement system and pro social equity policies that would foster transparency, competition, fairness and cost effectiveness, in public expenditure.

The PPD Act 2005 is anchored in the new Constitution, of 2010 article 227(1) of Nigeria, which sets standards concerning procurement requiring the public procurement system to adopt the principle factors namely: transparency, competition, fairness and cost effectiveness. Indeed it should be noted that, procurement Act must be amended to conform to the constitution (Article 227) which states that “a public entity contracting works, goods, and services, it shall do so in accordance with a system that is fair, equitable, transparency,

competitive and cost-effective' (Transparency International, 2014). The principle factors can be said to contribute to public procurement performance success and this is the focus of this study.

### **2.5.2 Fairness and equitability**

Fairness entails that the process of offer and acceptance is conducted without bias, providing timely access to same information to all parties (Watermeyer, 2000). However, according to Allison, (2007), fairness in public procurement context refers to procedural fairness. Procedural fairness has two requirements: *audi alteram partem* (the right of parties to be heard) and *nemo iudex in sua causa* (rule against bias). This relates to the relationship between the public entity and the contractors in relation to each other.

The first relationship requires that sufficient access to the procurement process be provided by procuring entity and that tender opportunities should be publicly available. In addition, a contractor should be familiar with all rules applicable to the process. With regard to the second relationship, the procuring entity should treat tenderers fairly in relation to each other meaning that no tenderers should have an advantage over another. One case in point whereby this regulation was violated is when National Social Security Fund (NSSF) altered a tender for the construction of Nairobi tallest skyscraper to favour Chinese firm (Business Daily, 2015). The advertised tender had condition requiring bidders to provide evidence of having constructed 2No. 40 storey buildings in the past five years, automatically locking out local contractors because in Nigeria we have none. Public procurement in the context of procedural fairness is based on administrative law. Fairness is intertwined with the principle of equity

and therefore equitable means “fair and impartial.”

However, Watermeyer, (2004) describes an equitable system as one where the only grounds for not awarding a contract to a tenderer who satisfies all the requirements are “blacklisting”, lack of capability or capacity, legal impediments and conflict of interest.

Stephanus, (2009) describes equitableness as the equaling of desperate groups. There exists no test or formula to determine what is equitable. The circumstances to be taken into account include but are not limited to the nature of the parties’ rights and interests as well as those of the state and the public in general. Equity does not necessarily mean that all people or groups should be treated equally and can include, public procurement, measures to address the inequalities. Moreover, the concept is broader than just redress of desperate groups (under preference and reservations, PPOA Act,2013), and needs to be interpreted by taking into account the obligation of fairness and the rights of participants in the procurement process to be treated equally.

According to, Stephanus,(2009) elements that contribute to fairness and equitability in public procurement performance success are namely: (i) Fair, objectively justifiable and non-discriminatory selection specifications and procedures to be used to evaluate tenders; (ii) the compulsory provision and publishing of information in adequate time provided that it does not preclude competition;(iii) the possibility that if in the public interest, procuring entities need not award a tender and may exclude abnormally low tender; (iv) clarification of tenders by procuring entity on request of participants ; (v) a code of conduct enforcing ethical standards for all role players (integrity) and ; (vi) the requirement that tenderers fulfill their



tax and socio-economic obligations to the state in order to qualify to participate.

### **2.5.3 Transparency**

The Concise Oxford Dictionary defines “transparent” as easily seen through; evident; obvious; easily understood; free from affection or disguise; frank. However in theory, transparency could mean visibility within an agency (Schooner, Gordon, & Clark, 2008). The concept of transparency is important in public procurement regimes and is mentioned as one of the principle factor of the Model Laws. Transparency and accountability are mutually reinforcing. Transparency enhances accountability by facilitating monitoring and accountability enhances transparency by providing an incentive for agents to ensure that the reasons for their actions are properly understood (Arrowsmith *et al.*, 2009).

Transparency means decision taken and their enforcement is done in a manner that follows procedures (Osafo, 2003). It also means that information is freely available and directly accessible to those who will be affected by the decisions and their enforcement. In the context of this study, it means that information concerning tender documents at pre-tender stage and at construction stage must be known and accessible to all who participate in the project implementation.

Efficiency in public is an important issue in cases where public procurement account for a large portion of economic activity, example in construction projects. Ensuring transparency in the construction projects procurement procedures is an essential determinant of efficiency, as it enhances the competitiveness of public projects procurement. Opaque and discretionary

construction procurement practices reduce incentives for firms to enter the market, and often endanger the relationship between government officials and contractors (Ohashi, 2009).

Ohashi, further in his study reveals that, contractors bid more aggressively under a transparent practice than a discretionary one. Other research work by Evenett and Hoekman, (2003,2004), assume that a competitive bidding environment, improves transparency in construction projects procurement procedure with two effects: (i) with regard to demand, the improved transparency diverts government expenditure away from construction works that could involve bribery; (ii) with regard to a contract, it increases the number of contractors involved in the bidding process.

Watermeyer, (2003) describes a transparent system as one, which the procurement process and criteria upon which decisions are to be made is published. The decision, include decision made during the procurement process and decision to finally award the tender. All information is publicly available giving reasons for the decision. This is possible to verify that the criterion was applied in evaluation. Watermeyer (2003), further indicated that, public building projects procurement is considered to be transparent if: (i) the Terms of Reference (TOR) upon which the building procurement process are to be conducted and the criteria upon which any decisions are to be made are properly documented and made available to public (Watermeyer,2003); (ii) the eventual procurement contract award decision, and where appropriate, any intermediate decisions, are made publicly available as are the reasons given for these decisions and; (iii) is possible to verify that the documented procedures and criteria were indeed applied.

Transparency serves as performance indicator of another objective of the procurement system- integrity. The widely accepted assumption is that, when transparency increases, corruption decreases. It is for this reason that the World Bank promotes transparency as a key objective in public procurement reforms in developing countries. Thus, transparency should be seen in every stage of building project procurement process. Public procuring entities rely upon publication- providing notice to the public as away to achieve transparency. Today, internet has reduced the cost and effort of promoting transparency, and some developing countries, such as Chile and Mexico have developed web-based systems that enhance sharing construction projects procurement–related information. With regard to public building projects procurement, transparency must be ensured through all the stages of the process namely: (i) compilation of the tender requirements; the invitation to tender; the processing and evaluation of the tender (Preliminary, technical and financial); (ii) the contract award, the review procedures and; (iii) the contract administration, monitoring and evaluation. However, transparency in construction projects procurement can be improved upon through (Almeida, 2004 and Stephanus, 2009): (i) the capturing key information in an electronic data base and the use of web-based information technology to publish information on procurement opportunities and awards of contracts; (ii) the harmonizing of procurement processes, procedures and methods within a country; standardisation of procurement documentation such as Standard Tender Document (STD); (iii) the introduction of challenge procedures in the form of adjudication where procurement processes, procedures and methods are comprehensively documented; (iv) providing that the criteria for evaluating tenders are specified; providing for a right to be present at the opening of tender; (v) providing for

reasons for the award and rejection of a tender; (vi) providing for the obligation to keep a record of the proceedings and; (vii) requiring publication of invitation to participate in tenders and providing that information on modifications or alterations to tenders is given at pre-tender stage (Almeida, 2004 and Stephanus, 2009). Transparency in public building projects procurement process can be regarded as transparent when the terms of reference (TOR) and conditions are clear and available to all tenderers and when after the decisions are made adherence to them before mentioned terms and conditions can be verified (Stephanus, 2009).

#### **2.5.4 Competition**

In public procurement systems, competition is seen as a way to obtain the best value as an outcome, which is an objective of public procurement systems. Competition is more accurately seen as a means to achieve other public procurement goals. Individuals and private companies may not talk or think in terms of competition, though they are more likely to talk and think about process for choosing contractor as “shopping round” or conducting market research (Schooner *et al.*, 2008).

Allison, (2013) indicates that, the principle of competition is said to be intertwined with cost-effectiveness and involves the achievement of value for money. In construction procurement sphere, the two aspects of competition are usually combined and government invites bids and tells the contractors that they are in competition with others. Akech (2005) asserts that, the principle of competition entails contracts being awarded by holding a competition between a number of competitors to establish which one of them can offer the most favourable terms that may deliver government’s project.

Akech (2005) further asserts that, competition not only ensures that government obtains value for money but is also important in maintaining the integrity of public procurement system. Competition is a means to fight corruption, allowing more contractors to compete for work that has regularly gone to long-term contractor may disrupt “cozy” relationship between the incumbent and the acquisition staff. Competition improves transparency and accountability. Unsuccessful contractor may have an interest in demanding public information why he did not obtain the contract; bid protests, that can inject transparency and accountability in public procurement system.

As Schooner *et al.*,(2008) point out, competition is also a restraint on efficiency. Competition is often at odds with, or at least perceived to be at odds with efficiency because it slows things down. Schooner notes further that, efficiency is often at odds with competition, transparency, and best value. There are, situations in which procuring entity is needlessly and justifiably inefficient and in such cases, it can be improved without compromising any of the goals. However, improving efficiency carries a price, in terms of losing some competition, transparency, and risk avoidance. Competition is a key factor in ensuring that governments, and their citizens, receive best value for money in their construction projects procurement. There are at least three avenues through which competition predict desirable performance in building projects procurement. First the free entry and absence of collusion, prices will be driven towards marginal costs. Secondly, contractor will have an incentive to reduce their operational costs over a time. Thirdly, competition serves as an important driver of innovation (United Nations, 2011).

However, competitive approach in tendering lead to cut-throat price competition and inadequate profitability benefit no-one (Prescott, 1998). According to Stephanus,(2009) the competition elements that contribute to procurement performance success are namely: (i) the use of open tender procedures as far as is practical;(ii) the setting of realistic time frames; (iii) the provision of and accessibility of relevant information; provision of clauses on how to deal with abnormally low tenders; (iv) the exclusion of tenders on the basis of fraud, corruption, mal-performance, and false declaration;(v) the disclosure of the evaluation criteria, which must be objective and quantifiable, and to relevant weight to be attached thereto, for the award of the tender and; (vi) the availability of alternative methods of procurement should the circumstances so requires (Stephanus,2009).

### **2.5.5 Cost-effectiveness**

Allison, (2007) argue that, cost effectiveness should be applied throughout the project procurement process from, project identification, formulation, the contract administration, evaluation, monitoring and audit. However, procurement system should be standardized as far as possible and provided with sufficient flexibility (Watermeyer, 2004). This is to facilitate the attainment of best value procurement in terms of quality, schedule and cost, using the least amount of resources necessary to effectively manage and control the building procurement process. Stephanus (2009) differs from the researchers discussed above and indicated that, cost-effectiveness does not entail preferring the lowest evaluated tender only, but should involve other factors. These factors include promptness' of delivery, the quality, future-operating costs of the space and similar factors. Stephanus (2009) notes further that,

particular circumstances need to be taken into account as emergencies, for instance, may require non-competitive methods to be used such as negotiated tendering method. Efficiency need to be taken into account as part of cost-effectiveness.

Cost-effectiveness must be ensured during the building project contract administration and management phase. This should be put into consideration when drafting agreement and conditions of contract. In particular, proper procedure and methodology of contract administration, dispute avoidance, and resolution mechanism are essential in large construction projects. For public building projects procurement to be effective, Stephanus (2009) proposes several provisions; (i) the keeping of a record of proceedings such as tender meeting, and site meeting; (ii) provisions on how to deal with abnormally low evaluated tenders; (iii) measures put in place to ensure effective contract evaluation, monitoring and audit; (iv) strict time frame adhered to at tendering stage and; (v) predictable cash flow from the procuring entity.

## **2.6 Project success performance**

According to Greer (1999), a project is successful if it satisfies all the three legs of the triple constraints, namely: quality cost and time. Although the causes for project success and failure have been the focus of many researchers, there has been no consensus on the issue. Other researchers make a distinction between project success and project management success (De Wit, 1998, Pinto & Slevin 1988). Pinto and Slevin (1988) argue that in spite of extensive research there has not been convergence on the components and causes of project success. For instance, they contend that project success is measured by comparing the project

outcomes to the overall objectives of the project; whereas project management success tends to be measured against the traditional measures of performance, namely, cost, time and quality. Cooke-Davies (2002) indicated that, delivering project success is more difficult than delivering project management success, because it predictably involves aspects which may be beyond the control of the project team. Identifying critical success factors and potential pitfalls in project at the front-end (knowing beforehand as much as possible and how to respond) will help project manager to minimize risks and ad hoc approach in managing uncertainties (Torp, Austeng, & Mangensha, 2004) (Pinto and Kharbanda, 1995) as cited in (William, 2009). In Israel, William (2009), used 127 projects executed and identified three different factors namely: (i) factors, which are independent of the project characteristics; (ii) factors which are solely influenced by uncertainty and; (iii) factors which are solely influenced by scope. However, Belassi and Tukel (1996) differs from the other researchers discussed above and identified a framework to helping project managers to understand the intra-relationships between factors in different groups. The factors related to project, the project manager, the project team, the clients' organisation and the external environment.

## **2.7 Related Empirical Studies**

Theories concerning public procurement system can be described as special case theories of public sector. Several theories put forward by various scholars provide a theoretical basis for public procurement system. Reimarova (2011) cited in Coase (1998) begins with the theory of transaction cost and stress that transaction costs are influenced by the institutional system of a given country. The institutional system is one of the most important aspects which



influence the performance of an economy. Reimarova (2011) defines transaction costs as any costs that arise from a contract (building contract).

Similarly, the principal agent theory is also relevant to the study. The theory is based on the relationship between the principal and agent, where the principal influences performance of some tasks by the agent in favor of the principal (Health & Norman, 2004). In the context of this study, the government of Kenya (Principal) engages Procuring Entities (Agents) and PPOA to undertake public procurement of building projects and enforcing the Public Procurement Act (2007) to influence the performance of the projects. With this relationship, the principal engages the agent who acts and makes decisions on behalf of the principal { (Bergen, Dutta, & Walker, 1992) (Eisenhardt, 1989) }. Agency theory, according to Eisenhardt, (1989) is directed at the ubiquitous agency relationship in which one party (the principal) delegates work or tasks to another party (the agent) who performs the work. Agency theory describes this type of relationship using the metaphor of a contract (Jensen & Meckling, 1976).

However, theory concerning project implementation/performance includes management theory of project management and production management. Project management is founded on three theories planning, execution, and control (Koskela & Howell, 2000a). Arguably, it holds that production is a transformation of inputs to outputs- this is a theory of project management. Regarding planning in project implementation, the convectional theory, management as planning, implies that planning is a core task of management. Execution is conceptualized as one-way communication (orders), within classical communication theory.

For control, the thermostat model suggests changing the performance level for achieving a predetermined goal in case of deviation. The predetermined objective is the completion of project on time, using the projected cost to attain the specified quality for client satisfaction. On the other hand, Taylor (1911) considered management a process and one that “if approached scientifically” would lead to success. His principles of scientific management initiated the concept of breaking a complex task down into a number of subtasks, and optimizing the performance of each task. The public procurement-related factors that may influence the contract performance of building projects are quite diverse. The specific variables considered for this study were transparency, competition, cost-effectiveness, fairness, and equity. The variables were seen as possibly predicting successful performance of public building project in Nigeria.

## **2.8 Summary of Reviewed Literature**

Public procurement is the epicenter where government budget get translated into services largely through the governments purchase of construction works, services and goods. Furthermore, public procurement must be transacted with considerations in mind, beside the economy. These considerations include transparency, competition, cost effectiveness, equity and fairness. Procurement procedures used in procuring public building projects are found in the PPDAct2005. The public procuring entities are bound by the Act, which is anchored in the new Constitution of Nigeria section 227, therefore the procedures used must be fair, equitable, transparent, competitive and cost effective.

Undesirable public building contracts performance results in Nigeria have been well

documented in various studies. Identified in various forms as delays, cost overrun, poor quality and poor project performance has been noted as ban of public building projects in Nigeria. Various scholars have had a great interest in the area of public procurement-related factors and whether the factors contribute to building contract performance. Researchers therefore need to develop a body of knowledge on the public procurement-related factors. Determine which factors that predict contract performance; describe them in a building works manual for use by public entities for successful contract implementation. This body of knowledge on performance predictors at the early stages of project procurement in Nigeria includes cost effectiveness, transparency, competition fairness and equitability. Studies that purpose to provide better understanding as to why there are undesirable public building contracts performance results (cost overrun, and poor quality) despite legal framework and regulations, would be of interest to scholars, public procuring entities who built buildings to provide services and other strategic objectives. It is of great benefits to further understand the influence of public procurement system on performance of public building project and how the system can be used as performance predictor at early stages of project procurement.

## CHAPTER THREE

### 3.0

### RESEARCH METHODOLOGY

This Chapter describes the methodology employed in carrying out the study. The chapter, therefore, focuses on: research design, area of the study, population for the study, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis

#### 3.1 Research design

The research design that was used in this study is the survey method, where questionnaires are used to evaluate and gathered information under this study. The descriptive survey is a research which involves the assessment of sampled people's opinion using questions. The survey research design is suitable for this study because the study will seek information from a sample that was drawn from a population using questionnaires

#### 3.2 Area of the Study

The study was conducted in Osogbo Local Government Area. Osun State consist of twenty-nine (29) local government area (L.G.A), with a land Area of 9,251 kilometers square it lies at Latitude  $7^{\circ} 30'$  North and Longitude  $4^{\circ} 30'$  East. Bounded in the east Ekiti and Ondo State, to the north Kwara State, to the south Ogun State and to the west by Oyo State. The state is situated in a tropical rain forest zone its cover and area of approximately 14,875 square kilometers and lies between the latitude  $7^{\circ} 30' 0''$  North and Longitude  $4^{\circ} 30' 0''$  East. Though a landlocked state, it is blessed with presence of many rivers and streams which serves the

water needs of the state.

### 3.3 Population for the Study

The total population of this study comprises of 60 Public building and procurement. Which means 45 Public building and 15 Procurement in Osun. Since the population is manageable, there will be no need for sample. Hence the entire population was used for the study

**Table 3.1 Population distribution of Contractor and Site Engineers**

	<b>of Works and Housing</b>	<b>of Staff</b>	<b>of</b>	<b>of Unit</b>	
	ent				
	ilding				

### Source survey 2023

### 3.4 Instrument for Data Collection

A structured questionnaire was used to collect data for this study. Questionnaire are an instrument designed to get answer to questions by using a form, which the respondents fill by themselves will be utilized. It is less time consuming and wider in terms of coverage. The responses provide data for testing the hypothesis of a study.

The questionnaire for this study was developed by the research and is meant to elicit information from procurement system and public building. The questionnaire is made up of four sections A and B. Section A contains the personal information of the respondent. Section B contains the questionnaires items, which are divided into three sub-sections according to the research question, such as research question 1, 2 and 3. All items are to be responded by

the indicating the appropriate respondent's best perception using four point scale. Strong Agree (SA), Agree (A), Strongly Disagree (SD), Disagree (D).

### **3.5 Validation of the Instrument**

To ensure the validity of the instrument, it was validated by three lecturers from the Department of Industrial and Technology Education, Federal University of Technology Minna. They were requested to read through the instrument items and criticize, suggest and recommend ways that will help ensure that the instrument actually measures what it is out to measure. The critiques, suggestions and recommendations of the validators was used to make final corrections on the instrument before it was administered to the respondents.

### **3.6 Administration of instrument**

The instrument used for the study was administered by the researcher personally. He visited some procurement board in Osun State to distribute and collection questionnaires in order to interview and collect information based on the research study. A total of about 100 questionnaires were distributed.

### **3.7 Method of Data Collection**

The analysis of data for the research question and hypothesis were accomplished using the mean, standard deviation and t-test was used to test the test the hypothesis of two groups of respondents at 0.05 level of significance.

The four rating scale developed is as follows:

Strongly Agree = SA = 4

Agree = A = 3

Strongly Disagree = SD = 2

Disagree = D = 1

$$X = \frac{\sum fx}{N}$$

Where: X = Mean

F = Frequencies of each response opinion

X = Weight of response opinion

N = Number of respondents of the items

The mean of the response option was computed with the formula

$$X = \frac{\sum fx}{N}$$

Where: X = Mean

$\sum$  = Summation

Therefore the mean value of the 4 point scale is:

$$X = 4$$

$$= \frac{3+2+1}{4}$$

$$= \frac{10}{4}$$

$$= 2.5$$

### 3.8 Decision Rule

The mean of 2.5 was used as decision point for every questionnaire item consequently any item with mean respondent of 2.50 and above was considered to be agreed and any item with response below 2.50 was considered as disagreed. An inferential t-test was used to test the hypothesis at 0.05 level of significance to compare the mean responses of the two groups.



## CHAPTER FOUR

### 4.0 DATA PRESENTATION AND DISCUSSION

#### 4.1 Research Question Presentation

##### 4.1.1 Research Question 1

What are the public procurement success factors that have significant influence on public building project in Osun State?

**Table 4.1: Mean and Standard Deviation of the public procurement success factors that have significant influence on public building project in Osun State**

$N_1 = 45$

$N_2 = 15$

---

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g entity publically advertised the  
t the local daily press or in the  
r web based system.

e for money for the project was  
d in terms of whole life cost, time  
faction of the client.

tractors were able to access  
on at the same time during  
process.

e frame at tendering stage was  
taking into account the  
nces of the procuring entity, the  
and public at large.

g entity officials documents all their  
and are accountable for their  
and accept responsibility for their

table cash flow of the client affect  
delivery  
urement due process as outlined in  
ic Procurement regulations were  
o.  
; put in place to ensure effective  
administration/evaluation,  
ing and audit

---

### **KEY**

$N_1$  = Number of Ministry of Works     $N_2$  = Number of Procurement board

$X_1$  = Mean of Ministry of Works                       $X_2$  = Mean of Procurement board

$SD_1$  = Standard deviation of Ministry of Works

$SD_2$  = Standard deviation of Procurement board

$X_T$  = Average of Contractors and Site engineers

The data presented in the Table 1 above revealed that both the Ministry of works and Procurement board are Agreed with all the items 1, 2, 3, 4, 5, 6, 7 and 8 with mean score ranging from 2.57 to 3.45.

#### **4.1.2 Research Question 2**

What are the extent to which due process is observe on public building project in Osun State?

**Table 4.2: Mean and Standard Deviation of the extent to which due process is observed on public building project in Osun State**

$N_1 = 45$

$N_2 = 15$

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Building projects often involve the use of public funds and resources, and therefore must adhere to a number of legal and ethical guidelines.

It is essential to ensure that the project is a fair and equitable one, and that everyone's interests have been taken into account.

Therefore, governments should ensure that all stakeholders have access to complete and accurate information about the project.

Consequently, the extent to which due process is observed on public building projects will vary depending on the specific nature of the project and the extent to which it is affected.

Due process is an important concept within public administration, ensuring that individuals and organizations are treated fairly and justly.

The extent to which due process is observed on public building projects will largely depend on the context and the particular issues at question.

Due process should be observed when entering into public building contracts.

Due process should be observed during the implementation phase of the project.

When constructing public building projects, the government is able to protect the rights of all individuals and organizations involved.

s to ensure that the public has faith  
overnment and that the decisions  
the process of building a public  
e in line with the law.

---

**KEY**

$N_1$  = Number of Ministry of Works     $N_2$  = Number of Procurement board

$X_1$  = Mean of Ministry of Works                       $X_2$  = Mean of Procurement board

$SD_1$  = Standard deviation of Ministry of Works

$SD_2$  = Standard deviation of Procurement board

$X_T$  = Average of Contractors and Site engineers

The data presented in the Table 2 above revealed that both the Ministry of works and Procurement board are Agreed with all the items 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 with mean score ranging from 2.59 to 3.53.

**4.1.3 Research Question 3**

What are the impact of public procurement system on public building in Osun State?

**Table 4.2: Mean and Standard Deviation of the impact of public procurement system on public building in Osun State**

$N_1 = 45$                        $N_2 = 15$

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ocurement systems are becoming  
gly important in the construction  
gement of public buildings.

Procurement systems are especially  
important for public buildings, such as  
schools and hospitals, because of their large  
and complex nature.

Benefits of public procurement systems  
for public buildings are far-reaching.

Procurement systems also help to  
achieve the lowest possible cost for materials  
and services, which helps to reduce costs for  
the government.

Procurement systems help to ensure  
that the environment is taken into  
consideration.

Procurement systems have a  
positive impact on public buildings,  
to ensure that they are completed to  
the highest possible standards, within  
the allocated budget and on time.

Procurement systems are crucial to  
the success of public building projects.

Transparency is one of the most significant  
benefits of public procurement systems is  
the ability to ensure efficient use of  
public funds.

Procurement systems also provide a  
platform for job creation.

Procurement systems can also create  
public-private partnerships.

Benefits of public procurement systems  
for public building projects are numerous.

Procurement systems can also help to  
improve public safety.

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## KEY

$N_1$  = Number of Ministry of Works     $N_2$  = Number of Procurement board

$X_1$  = Mean of Ministry of Works                       $X_2$  = Mean of Procurement board

$SD_1$  = Standard deviation of Ministry of Works

$SD_2$  = Standard deviation of Procurement board

$X_T$  = Average of Contractors and Site engineers

The data presented in the Table 3 above revealed that both the Ministry of works and Procurement board are Agreed with all the items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 with mean score ranging from 2.92 to 3.45.

## 4.2 Hypotheses Presentation

### 4.2.1 Hypothesis One

There will be no significance difference in the mean response between public building and procurement on the public procurement success factors that influence on public building construction performance in Osun State.

**Table 4.4 t-test Analysis of Mean Difference between Responses of public procurement success factors that have significant influence on public building project in Osun State**

$N_1 = 45$

$N_2 = 15$

of works and	or
using	ign.
ment	

Table 4.4 presents the t-test analysis of the public procurement success factors that have significant influence on public building project. The table revealed t-calculate value (-3.77) to be less than t-table value (1.96) at 0.05 level of significant at df 58. This implies that the

null hypothesis is uphold hence there is no significant difference in the respondents response regarding the public procurement success factors that have significant influence on public building project.

#### 4.2.2 Hypothesis Two

There will be no significance difference in the mean response between public building and procurement on the impact of public procurement system on public building in Osun State

**Table 4.5: t-test Analysis on the impact of public procurement system on public building in Osun State.**

<b>N<sub>1</sub> = 45</b>	<b>N<sub>2</sub> = 15</b>		
<b>of works and</b>		<b>or</b>	
		<b>ce</b>	<b>ce</b>
<b>ilding</b>			<b>ign.</b>
<b>ment</b>			

Table 4.5 present the t-test analysis on the impact of public procurement system on public building in Osun State. The table revealed t-calculate value (-1.39) to be less than t-table value (1.96) at 0.05 level of significant at df 58. This implies that the null hypothesis is uphold hence there is no significant difference in the respondents response regarding the impact of public procurement system on public building in Osun State.

#### 4.3 Findings of the study

Regarding the data collected and analyzed, the following findings were revealed according to the research question

1. Findings on public procurement success factors that have significant influence on public building contained in Table 4.1 revealed that Procuring entity publically advertised the tender in the local daily press or in the internet or web based system, the value for money for the project was considered in terms of whole life cost, time and satisfaction of the client, all contractors were able to access information at the same time during tendering process, the time frame at tendering stage was realistic, taking into account the circumstances of the procuring entity, the tenderers and public at large, procuring entity officials documents all their decisions and are accountable for their decisions and accept responsibility for their actions, unpredictable cash flow of the client affect project delivery, the procurement due process as outlined in the Public Procurement regulations were adhered to, measures put in place to ensure effective contract administration/evaluation, monitoring and audit.
2. Finding on the extent to which due process is observe on public building project as contained in Table 4.2 showed that public building projects often involve the expenditure of public funds and resources, and must adhere to a number of legal and ethical guidelines, this helps to ensure that the project is a fair and equitable one, and that everyone's interests have been taken into account properly, generally, governments should ensure that all stakeholders have access to complete and accurate information about the project, ultimately, the extent to which due process is observed on public building projects will depend on the specific nature of the project and who is affected, due process is an important concept within the law, ensuring that individuals and organizations are treated fairly and justly, the extent to which due process is



observed on public building projects will largely depend on the context and the particular project in question, due process should be observed when awarding public building contracts, due process should be observed during the construction phase of the project, due process when constructing public building projects, the government is able to protect the rights of all individuals and communities involved, this helps to ensure that the public has faith in the government and that the decisions made in the process of building a public project are in line with the law.

3. Finding on the impact of public procurement system on public building contained in Table 4.3 revealed that public procurement systems are becoming increasingly important in the construction and management of public buildings, public procurement systems are especially important for public buildings, such as schools and hospitals, because of their large scale and complex nature. the impacts of public procurement systems on public buildings are far-reaching, Public procurement systems also help to ensure the lowest possible cost for materials and services, which helps to reduce costs for the public, public procurement systems help to ensure that the environment is taken into consideration, public procurement systems have a significant impact on public buildings, helping to ensure that they are completed to the highest possible standards, within budget and on time. Public procurement systems are crucial to the success of public building projects, cost Savings is one of the most significant impacts of public procurement systems is their ability to ensure efficient use of taxpayer funds, public procurement systems also provide a platform for job creation, public procurement systems can also create better public-private partnerships, the impacts of public

procurement systems on public building projects are numerous, public procurement systems can also help to improve public safety.

4. There is no significance difference in the respondents' response as regard public procurement success factors that influence on public building construction performance.
5. There is no significance difference in the respondents' response as regarding the impact of public procurement system on public building.

#### **4.4 Discussion of Findings**

The findings of research question one unveils the public procurement success factors that have significant influence on public building project in Osun State. The results showed that eight items were agree among. Also Table 4.4 showed that there was no significance difference between the public building and procurement on the public procurement success factors that influence on public building construction performance in Osun State. This result is in line with Patil & Pataskar (2013), Material management consist of a series of processes that need to be integrated, coordinated and synchronized well to ensure that public procurement success factor by procuring entity publically advertised the tender in the local daily press or in the internet or web based system and all contractors were able to access information at the same time during tendering process.

This indicate that both public building and the procurement do not differ in their views on the current public procurement success factor that have significant influence on public building project in Osun State. This indicate that it is important for the factors that have significant influence on public building construction projects in Osun State.

The findings from Table 4.2 revealed the extent to which due process is observed on public building projects in Osun State. The result showed all the 10 items agreed. The findings are also emanated from Odeh, (2012), that the due process that is observed on public building projects have been the subject of inquiry especially in aspects such as time overrun, cost overrun, construction wastes and low productivity.

Also table 4.4 showed the findings of the study on hypothesis one which revealed that there was no significant difference in the mean response between public building and procurement on the public procurement success factors that influence on public building construction performance in Osun State.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents a summary of the problem, the procedure used in the study and conclusion base on the findings of the study.

#### **5.1 Summary**

This study assesses the impact of public procurement system on public building projects in Osun State. Three research questions and two hypotheses guided the study. Research question were answered using mean and standard deviation. A mean of 2.50 is set for data reporting. Any question item with mean 2.50 and above is regarded Accepted while below 2.50 is Rejected whereas the two formulated hypotheses were tested using t-test analysis.

A survey research design was adopted in carrying out the study. A total of 80 respondents were involved in the study. This was made up to 45 Public building and 15 Procurement in Osun State. Instrument for data collection was a questionnaire titled Public Procurement System on Public Building Project Questionnaire. The questionnaire was based on 4 point rating scale of strongly agreed, agreed, strongly disagreed, disagreed with numerical values 4 3 2 1 respectively. The questionnaire was administered by, personally by the researcher. Data collected was analyzed and findings of the study discussed appropriately.

#### **5.2 Implication of the study**

The results obtained from the findings of the study, have a lot of implications on the impact of public procurement system on public building project in Osun State. The findings have also exposed many challenges affecting the public procurement system on public building projects in Osun State and this findings are sincerely accepted and actively implemented in procurement board in Osun State it will assist in reducing the challenges affecting the procurement system on public building projects in Osun State. The public procurement system on public building projects in Osun State if this entire challenges are minimized it will lead to reduction in using substandard building specification in construction sites in Osun State and environs and thus it will prolong the life span of the structural elements in the Osun State.

### **5.3 Conclusion**

The research findings revealed that; cost effectiveness and transparency, are the key predictor of project performance success and therefore have significant influence on contract performance of public building project. The findings of the study are as follows:

- i. **Transparency this include;** advertisement of the tenders in local daily newspaper or in web site, Notification of the successful contractor and other tenderers on the outcome of the tender that is publicly announcing the winner and making public the result of any protest or other challenge to the award, public entity official to document their decisions and should be accountable for their decisions and the documentation should not only be at evaluation but also contract administration, contractors accessing relevant information at all stages of project implementation, and following the procurement due process

- ii. **Cost effectiveness which include;** taking into consideration the value for money for the project in terms of whole life cost and satisfaction of the client, measures put in place to ensure effective contract administration/ evaluation and monitoring and audit
- iii. **Fairness and equity that include;** criteria for evaluating tenders which should be objectively justifiable and non-discriminatory and making public the criteria and any clarification of tenders by procuring entity on request was done without discrimination
- iv. **Competition which include;** all contractors were able to access relevant information at the same time during tendering process, and use of open tendering method.

This study revealed that, cost effectiveness extent of influence on performance of public building project was also rated high. This was achieved though taking into consideration the value for money for the project in terms of whole life cost and satisfaction of the client and ensuring professionals undertake the role of evaluating bids and contract administration. The majority of respondent agreed that, the extent of influence by competition was high on performance of project as well. This was because of the use of open tendering method, and accessing relevant information at all stages of project implementation.

This study revealed other factors beside those of public procurement-related factors that have an effect on the project implementation namely; dispute resolutions, which consumes a lot of time before they are resolved particularly at contract award stage.

#### **5.4 Contribution of Knowledge**

1. The research provides useful analysis to identify the factors that have significant influence and impeding improvement of the public procurement system on public building on contract performance.
2. This study revealed that, cost effectiveness extent of influence on performance of public building project was also rated high.
3. It provides the majority of respondent agreed that, the extent of influence by competition was high on performance of project as well.

### **5.5 Recommendation**

Based on the findings of the study, the following recommendation were made;

1. Adopt and implement e-tendering/bidding. This will ensure that the key public procurement success factors, transparency, cost-effectiveness, competition, fairness, & equity are adhered to. Costs benefit analysis on public projects to be undertaken before construction, with stakeholders/community participation.
2. The study recommends affirmative action to ensure that the costs of building materials are manageable through VAT exemption. Alternative technology to enable use of substitute and affordable use of materials e.g. use of panels instead of stones. Use of building technology like the East Asian countries that reduce the time required to construct hence eliminating cost overrun, time overrun etc. Risk management should be addressed at early stages of procurement process to avoid delay in project implementation from inception to close up.
3. Public procurement should be more transparent with possibility of meeting minutes being

made available to the public as well as video archives. Proper documentation at all stages to enhance monitoring, evaluation and audit. The study recommends E-Tendering, contractor selection and rating system to be introduced and implemented. Improve communication and monitoring by adopting ICT.

4. The laws/ rules and procedures should be regularly reviewed to address the challenges encountered in procurement processes. Engage professionals in all projects/ competent project managers in construction project management. Project implementation team monitoring and evaluation agree on milestone.

5. The study recommends procurement officials to be involved in project management. Procurement agents should endeavor to acquire in house technical capacity and reduce reliance on government ministries for technical assistance. Improve communication, monitoring and evaluation.

6. Cost effectiveness and transparency must be addressed in all ways in order to ensure success performance of building projects in public sector. Finally, the study recommends suitable procurement management manual to be simulated to current public procurement works policy manual. A conceptual model showing the public procurement related factors as predictors of project performance success with a review/feedback mechanism hence improving considerably contractor rating system in future selection process.

## **5.6 Suggestion for further research**

i. Since the research was carried out in Osun State, it is necessary to carry similar studies in



some other states where research has not been carried out.

- ii. Study can be carried after the projects have been completed to know the influence of the public procurement systems.
- iii. Effect of public procurement system on time performance for public building construction projects.
- iv. Model for Contractor selection in Nigeria

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**APPENDIX A**

**QUESTIONNAIRE**

**IMPACT OF PUBLIC PROCUREMENT SYSTEM ON PUBLIC BUILDING PROJECTS  
IN OSUN STATE**

**Instruction:** I am an undergraduate student from the Department of Industrial and Technology Education, Federal University of Technology; Minna. Conducting research on Impact of Public Procurement System on Public Building Projects in Osun State.

Please help in filling the questions by ticking (✓) appropriately, the information given will be used for confidential purpose using the response rating scale as follows;

**PERSONAL DATA**

Public building

Procurement

Strongly Agree = SA = 4

Agree = A = 3

Strongly Disagree = SD = 2

Disagree = D = 1

## RESEARCH QUESTION I

What are the public procurement success factors that have significant influence on public building project in Osun State?

<b>S/N</b>	<b>Public procurement success factors that have significant influence on public building project</b>	<b>SA</b>	<b>A</b>	<b>D</b>	<b>SD</b>
1	Procuring entity publically advertised the tender in the local daily press or in the internet or web based system.				
2	The value for money for the project was considered in terms of whole life cost, time and satisfaction of the client.				
3	All contractors were able to access information at the same time during tendering process.				
4	The time frame at tendering stage was realistic, taking into account the circumstances of the procuring entity, the tenderers and public at large.				
5	Procuring entity officials documents all their decisions and are accountable for their decisions and accept responsibility for their actions.				
6	Unpredictable cash flow of the client affect project delivery				
7	The procurement due process as outlined in the Public Procurement regulations were adhered to.				
8	Measures put in place to ensure effective contract administration/evaluation, monitoring and audit				

## RESEARCH QUESTION II

What are the extent to which due process is observe on public building project in Osun State?

S/N	Extent to which due process is observe on public building project	SA	A	D	SD
1	Public building projects often involve the expenditure of public funds and resources, and must adhere to a number of legal and ethical guidelines				
2	This helps to ensure that the project is a fair and equitable one, and that everyone's interests have been taken into account properly.				
3	Generally, governments should ensure that all stakeholders have access to complete and accurate information about the project.				
4	Ultimately, the extent to which due process is observed on public building projects will depend on the specific nature of the project and who is affected.				
5	Due process is an important concept within the law, ensuring that individuals and organizations are treated fairly and justly.				
6	The extent to which due process is observed on public building projects will largely depend on the context and the particular project in question.				
7	Due process should be observed when awarding public building contracts.				
8	Due process should be observed during the construction phase of the project.				
9	Due process when constructing public building projects, the government is able to protect the rights of all individuals and communities involved.				
10	This helps to ensure that the public has faith in the government and that the decisions made in the process of building a public project are in line with the law.				

### RESEARCH QUESTION III

What are the impact of public procurement system on public building in Osun State?

S/N	Impact of public procurement system on public building	SA	A	D	SD
1	Public procurement systems are becoming increasingly important in the construction and management of public buildings.				
2	Public procurement systems are especially important for public buildings, such as schools and hospitals, because of their large scale and complex nature.				
3	The impacts of public procurement systems on public buildings are far-reaching.				
4	Public procurement systems also help to ensure the lowest possible cost for materials and services, which helps to reduce costs for the public.				
5	Public procurement systems help to ensure that the environment is taken into consideration.				
6	Public procurement systems have a significant impact on public buildings, helping to ensure that they are completed to the highest possible standards, within budget and on time.				
7	Public procurement systems are crucial to the success of public building projects.				
8	Cost Savings is one of the most significant impacts of public procurement systems is their ability to ensure efficient use of taxpayer funds.				
9	Public procurement systems also provide a platform for job creation.				
10	Public procurement systems can also create better public-private partnerships.				
11	The impacts of public procurement systems on public building projects are numerous.				
12	Public procurement systems can also help to improve public safety.				



**APPENDIX II**  
**REQUEST LETTER TO VALIDATORS**

Industrial and Technology Education Department  
Federal University of Technology,  
P.M.B. 65,  
Minna,  
5<sup>th</sup> January, 2023.

Dear Sir,

**REQUEST FOR FACE VALIDATION OF INSTRUMENT FOR IMPACT OF  
PUBLIC PROCUREMENT SYSTEM ON PUBLIC BUILDING PROJECTS IN  
OSUN STATE**

I am an undergraduate student of the above named address currently undertaking a study on the topic: IMPACT OF PUBLIC PROCUREMENT SYSTEM ON PUBLIC BUILDING PROJECTS IN OSUN STATE.

Attached is the draft copy of the instrument. As an expert in this area, your assistance is hereby solicited to enable me accomplish this task. Kindly go through the item to verify their clarity, relevance and appropriateness in the use of language. In addition to this you can also make further suggestions that will improve the status and quality of the instrument. Your contribution to this work is highly appreciated.

Thanks

Yours faithfully,

**ABE ISAAC IFEOLUWA**  
**2016/1/64072TI**

