Procurement Processes in The Public Sector: A Case Study of Lagos State, Nigeria.

AFOLABI-ONI YEMI¹, OLADIGBOLU EDWARD², JAJI AMINA³, EGBEBRA TONIBOR⁴, MUHAMMAD MAHMOOD⁵, OLAKUNLE SOLOMON⁶, ZAIDU LUQMAN⁷, EZEIFIOMA CHIEBUKA⁸, ADENIYI JAMES⁹

^{1, 2, 3, 4, 5, 6, 7, 8, 9} Department of Architecture, Bells University of Technology, Ota, Ogun State, Nigeria.

Abstract- The study to examine procurement systems and their impacts on cost management and delivery, the study's objectives are to identify different procurement methods deployed often by Lagos construction professionals, look at issues that can arise when using different procurement systems for building projects, and look at how procurement systems affect construction costs. The primary a standardized and well-structured source. questionnaire, and secondary sources, which covered books, journals, applicable literature, peerreviewed journals, official government publications, newspapers, magazines, and online sources, were utilized to obtain the data for this study. This study employed a descriptive survey research design. A sample size of fifty (50) respondents was obtained using a stratified random sampling technique from the total number of professionals employed in the various construction industries in Lagos State. Standardized methods were used to analyze the data that was gathered. The data gathered was analyzed using descriptive statistics. Project stakeholders and clients should work together to ensure that the right procurement methods that would significantly reduce project costs are implemented in order to guarantee effective delivery and the best results when projects are done.

Indexed Terms- Procurement, Procurement System, Tendering, Deliverables, Construction Management, Cost.

I. INTRODUCTION

In many nations, the construction sector is an important factor in the economy's backbone. (Ngai, et al., 2002), regularly making 7 to 10 percent of the GDP (Winch, & G., 1996). Additionally, construction-

related materials and methods have an impact on environmental, health, and security concerns. (Bayliss, et al., 2004). It needs to be noted that a successful construction sector is essential because its processes and/or products immediately impact all people in modern society (Cheung, et al., 2002) (Ngai, et al., 2002) (Eriksson, P.E, & Pesamaa, 2007).

As a result, in order to increase the possibility of successful construction projects and improved final products, specialists, academics, and the general public have pushed for a shift in beliefs, behaviors, and practices (Love et al., 2000, Dubois and Gadde, 2002).

The necessity for collaboration among many project actors has grown as a result of construction projects' increasing challenges, inconsistency, and schedule constraints (Anvuur and Kumaraswamy, 2007). However, relationships in the construction sector have traditionally been quite competitive and combative (Cheung et al., 2003), It is mostly due to the traditional procurement practices potentially resulting in multiple issues for example the buying process. (Eriksson and Laan, 2007). Therefore, one important area for improvement maximize collaboration procurement procedures, which can significantly increase the likelihood that a project will succeed (Cheung et al., 2003, Eriksson, 2007).

However, persistent customer behavior makes changing procurement procedures difficult (Laedre et al., 2006). Although diverse project objectives will benefit from customized procurement procedures (Cox and Thompson, 1997).

(Love et al., 1998, Wardani et al., 2006), Regardless of any variations across projects, clients frequently opt for the procurement practices they are accustomed to employing. (Laedre et al., 2006). A deeper awareness

of how various procurement processes impact various project performance factors is essential in improving change. Previous studies in this field have only looked at the impact of one or a few specific procurement options on one or two project objectives. An integrated and systemic approach to the procurement process is essential for successful project governance in the construction industry.(Cox and Thompson, 1997, Eriksson and Pesämaa, 2007, Eriksson, 2008).

Several studies have shown that different procurement processes are used for project delivery in Nigeria Studies by Ojo, Adeyemi, and Fagbenle (2006), Ogunsanmi, Iyagba, and Omirin (2003), Dada (2012), and Ojo, Adeyemi, and Fagbenle (2006) all of them are in favor of using traditional procurement techniques, such as direct labor, design and build, project management, and labor alone. They also support partnerships and strategic partnerships. The success of most projects can be significantly impacted by the employment of different procurement processes.

According to the Federal Office of Statistics, approximately 70% of Nigeria's fixed capital formation happens in the country's construction sector (FOS)(2004), yet due to cost overruns that result in project abandonment, its performance in the economy has been and remains quite severe. For instance, compared to the World Bank's average observation of roughly 3.2 percent in developing nations, the contribution of the Nigerian construction industry to employment has remained steadily at 1.0 % over the last decade. (Idrus, 2008).

The traditional design-bid-build method of procurement is still employed extensively in Nigeria's construction sector, and this practice is expected to remain. The clients, contractors, subcontractors, suppliers, and other essential professionals who are in charge of project planning and supervision are also included in the Nigerian construction sector. Quantity surveyors, structural and service engineers, and architects all work in this field.

One of the main problems in the Nigerian construction sector is execution phase delays. Both small and large processes variable this. Almost all of the projects that were carried out over the years in Nigeria had delivery difficulties. Even though it makes less of an economic contribution than the manufacturing or other service sectors, Nigeria's construction industry continues to play a major role in the country.

II. STUDY AREA

The study was carried out in Lagos State, the major financial and economic hub of Nigeria in Africa. The focus of this sector includes building contractors, architects, quantity surveyors, clients, and real estate developers. For the objective of this research work, professionals were selected randomly from the various construction industries in Lagos State. The primary professionals who represent the client, contract, or consultant organizations in the procurement process are architects, builders, civil engineers, and quantity surveyors. A stratified random sampling technique was employed in reaching a sample size of fifty (50) respondents drawn from the total number of professionals.

III. LITERATURE REVIEW

Over the years, massive exploitation of Nigeria's public procurement systems, particularly in the construction sector, has resulted in cost inflation, delivery delays, subpar work, and project abandonment. The construction industry has a crucial role to play for a developing country like Nigeria, which is still working to provide enough infrastructure, and social amenities including educational and medical facilities, as well as decent housing for its teeming population (Faniran, 2002).

A construction project's procurement strategy must be carefully planned to match the technical requirements and/or goals of the project for it to be successful. Each construction project is unique, with its requirements. Furthermore, cost control, suitable technical characteristics, and timely delivery are important considerations for customer satisfaction and contractor needs (Alhazmi, 2000).

Governments around the world face a significant problem in lowering the cost of public project delivery, and increasingly enhanced procurement procedures and methods are being viewed as unique

means of attaining reduced costs for the delivery of infrastructure and value for money.

First, the procurement of building projects involves several connected and sequential activities, making procurement systems and methodologies crucial components of the construction sector. The achievement or failure of a project is significantly influenced by the quality and efficiency of these processes. Secondly, today, a developer can choose from several procurement strategies when selecting a project. However, choosing a technique from the available procurement options to cut costs and guarantee timely and highquality project delivery is a significant challenge encountered by project developers.

PUBLIC PROCUREMENT

Public procurement is a technique used by government parastatals, departments, ministries, and agencies to obtain products and services from the private sector while adhering to set rules and guidelines. According to Kari, Mona, and Jan (2010), The term "public procurement" refers to all purchases made by public institutions and includes contracts between the public and private sectors for a variety of services, including health care, the armed forces, and construction.

• PUBLIC PROCUREMENT SYSTEMS

The project delivery process and procedures as well as the organizational and financial management components have altered current procurement methods. As a result, this study's wide classification of procurement systems into four kinds is based on recently published literature which are:

- Separated systems/Traditional systems;
- Integrated systems;
- · Management-oriented systems; and
- Collaborative / Partnering systems.

Separated System or Traditional System

These programs are also referred to as "traditional" programs. The main characteristics of these systems are the strong separation between the design and construction processes and the absence of interaction across this barrier (Cox et al, 1998). In this approach, the client hires an outside consulting team on a fee basis to design the project in detail and provide the

tender documents on which contractors submit their competitive bids. The chosen bidder then enters into a direct contract with the client and is overseen by the consultants.

• Integrated Procurement Systems

solution combines or combines the the project's responsibilities of design construction, as its name suggests (Ashworth, 2001). A single contracting company is given the task of handling both duties. Because the client will only have to work with one company for both the project's design and construction, it is often referred to as a parallel or responsibility procurement Following that, the contractor will be required to appoint and manage design and construction teams.

• Management Oriented Procurement Systems

The management role is separated from design and construction in this sort of procurement system. These arrangements involve the client entering into a contract with an outside company, which is in charge of planning and coordinating the design and construction of the work. This suggests that the administration of the project's design and construction is outsourced to a contractor that works for the customer as a management consultant. The actual building work is subsequently delegated to a large number of "specialists" or subcontractors who sign agreements with the management contractor or the client.

• Collaborative Procurement Systems

In this system, the client pays a fee to an outside consulting team to thoroughly plan the project and prepare the tender documents on which contractors submit their competitive bids. The consultant team examines the selected bidder as they enter into a direct contract with the customer (De Valence et al, 1999).

PROCUREMENT METHODS EMPLOYED IN THE NIGERIAN CONSTRUCTION INDUSTRIES

The Federal Government established a Due Process Unit under the presidency to carry out the reform to purge the system (BMPIU, 2005). Due Process is a method that ensures thorough adherence to the policies and guidelines that should control contract awards,

such as transparency, fair competition, and cost accuracy (BMPIU 2005).

Although, the Nigerian construction industry has many difficulties when it comes to contract procurement processes. These difficulties are visible in the varied methods utilized for contractor selection and, subsequently, project execution. The Nigerian public procurement system has been badly misused over the years, resulting in a significant loss of resources.

 CHALLENGES ENCOUNTERED WHEN EMPLOYING VARIOUS PROCUREMENT METHODS EMPLOYED FOR CONSTRUCTION PROJECTS IN NIGERIA.

the Budget Monitoring and Price Intelligence Unit (BMPIU): The following steps must generally be followed for the public contract procurement procedures required by

- Project planning,
- Advertisement,
- Prequalification,
- Short-listing,
- Tender action,
- Determination of Winning Bid,
- Award of Contract and
- Project execution.

When employing the due process procurement approach to bid on contracts, common difficulties experienced in the Nigerian construction industry include:

• Presentation Problems; either the client's objectives are unclear, or the prospective contractor has a solid understanding of how to convey the fundamental data needed to evaluate his company. To demonstrate past performance, auditors, for instance, want copies of letters of award and certificates of practical completion for comparable jobs executed within the five preceding years; they do not demand pictures of finished projects. Commendation letters from prior clients could also be useful.

- Vulnerability of paper-based prequalification; basically, information and documents supplied on paper records by contractors are used to create a prequalification guide. This offers chances to showcase the capabilities of the business using records that attest to its particular reputation and appropriate experience in such activities. Public contracts are often obtained within a legally binding annual budget. This means that within a year, the majority of construction-related choices must be completed. Consultants may not have the time or resources to verify some of the claims made by contractors because of time constraints during the procurement process.
- Formation of Cartels; there is a chance that some contractors would file fictitious claims for completed and continuing projects, which raises the risk of cartel formation. A group of contractors may conspire to weaken the competition processes, which is a concern connected with cartels in the public contract procurement system.
- False claims; the qualifications of the primary technical and support workers that work for the contractors are typically used to gauge their technical capabilities. Assessors typically lack accurate information. Perhaps made-up lists and certificates are given as a result of skill shortages. This suggests that many sectors may claim one person, without that person's approval, or untraceable individuals (dead, bankrupt, and unlawful entities) as their company's technical staff. Many contractors lack the funding to employ the required number of skilled people, so they may not use them on projects.
- Unrealistic financial statements; A big credit
 amount may not always indicate a contractor's
 credit reliability, according to bank financial
 statements, which are elements of the
 documentation used to evaluate contractors. This is
 because it could be challenging to distinguish
 between a contractor's liabilities and his credit
 base in light of his anticipated commitment to the
 project. Nevertheless,
- This cannot be effectively communicated through the information supplied in annual audited reports.
- Level of Firm Professionalism; the level of professionalism that a construction firm should possess is still unclear in the Nigerian construction

sector. Architects, quantity surveyors, engineers, and builders, for example, should all be fully registered professionals in a technically sound construction contracting firm. However, in a supply project including the acquisition of equipment, the firm may just need to present credible experience in the delivery and installation of pertinent instrumentation and equipment. Basic academic requirements may exist, however demanding professional credentials may be very difficult.

 Other challenges include corruption, bribery, and extortion by individuals in charge of due process and this has largely contributed to the failure of the procurement system in Nigeria.

IV. METHODOLOGY

Primary and secondary data were the foundation of the data gathering for analysis in this research project. The administration of surveys served as the primary source of data, and secondary sources of data included the reading of textbooks, journals, applicable literature, peer-reviewed journals, official government publications, and also newspapers, magazines, and online sources.

V. RESULTS AND DISCUSSION

This will analyze and interpret primary data that was gathered through the use of an online survey. The study's presentation and analysis of the data from the questionnaires are covered in this part. The analysis method involved using a tabular form to display the variables, respondents, and pertinent patterns of answers.

Table 1

Variable	Number of respondents	Percentage %
Questionnaires returned	45	90%
Questionnaire not returned	5	10%
Total	50	100

45 respondents (seen in the table above) gave the distributed questionnaires (in online Google form) back in a usable state, while 5 people did not. This suggests that 90% of the surveys were responded to, making this the sample size. Therefore, these 45 questions will serve as the foundation for the presentation, analysis, and interpretation of the results.

Table 2: Gender distribution

Gender	No of Respondents	Percentage
Male	30	66%
Female	15	33%
Total	45	100%

Source: Field Work, 2022.

The above table shows that 30 respondents representing 66 percent were male and 15 respondents representing 33 percent were female.

Table 3: Qualification Distribution

Tuble 3. Qualification Distribution			
Occupation of	No of	Percentage	
Respondents	Respondents		
Architect	10	22%	
Quantity Surveyor	15	33%	
Engineers	8	18%	
Others	2	4%	
Total	45	100%	

Source: Field Work, 2022.

According to the above table, 10 respondents—or 22% of the total sampled population—were architects, while 15 respondents—or 33% of the population—were quantity surveyors; 8 respondents—or 18% of the total sampled population—were engineers; and 2 respondents—or 4% of the population—were in any of several other occupations, including bricklayers, drivers, accountants, and office clerks.

VI. ANALYSIS OF RESEARCH QUESTIONS

According to the survey, it was noted that 45 respondents which represents 90% of the total respondents agreed to due process and traditional design-bid-build methods for procuring construction contract works. It was also unanimously accepted that

the challenges facing procurement methods in the Lagos construction industries include corruption, cost inflation, cost overrun, cumbersome prequalification and selection criteria, and project delays and delivery failures.

30 respondents or 67% accepted that proper choice of procurement methods can help to significantly reduce construction costs. 35 respondents representing 78% thought that the traditional method of the design-bidbuild is the most cost-effective for construction projects in Nigeria.

CONCLUSION

Through the thorough case study conducted, this study talked about the various procurement processes in the public sector and the most widely utilized process used in the Nigerian construction industry which is the traditional system. Unquestionably crucial elements of a successful construction project are efficient cost management and on-time project delivery. It also emphasized that clients are demanding higher value from their investments in this uncertain business climate. They want their project to be completed on time, within the estimated cost and time, and also in the prescribed quality. The use of the various project procurement systems shows that the construction industry is now trying to meet the client's needs. This is because the various techniques of procurement will each have a unique impact on the project's cost, delivery schedule, and quality. It has been found that selecting the optimum procurement approach for a building project necessitates giving all factors considerable consideration at the project's outset. This is because every system has distinct qualities that will ultimately have an impact on the project's cost, delivery timeframe, and degree of quality.

RECOMMENDATIONS

- Project stakeholders, in particular clients, should strive to ensure that the appropriate procurement methods are used to ensure successful delivery and the best results after such projects are completed.
- To address the issue of project execution delays, the use of procurement methods for tendering must be supplemented with incentive/disincentive forms of contracts.

- Government at all levels should ensure the transparency and sustainability of public procurement through the full implementation of the Public Procurement Act's provisions to foster caution at all levels of government and create a more effective institutional framework for combating and sanctioning corrupt practices.
- It is also recommended that the primary focus of the construction industry vying for construction works should be on project management abilities, suitable procurement techniques with a proper budget, timely information release, and design completion.

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