

Appraisal of Construction Project Procurement Policies in Nigeria

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ABSTRACT: *The success of performance of public sector projects in Nigeria is tied to the impact of procurement strategy or policy used in providing the building. Procurement policies significantly influence the success of construction projects since they are designed to provide solutions to specific project needs or conditions. The Nigerian construction industry was analyzed with particular emphasis on public sector procurement. The general performance of public sector projects in Nigeria was broadly assessed and quite unfortunately the literature review has criticized public sector procurement in Nigeria of been inefficient for efficient project delivery. Equally the respondents to the survey data obtained from the questionnaire distributed and oral interview conducted suggest that projects are affected by the procurement strategy adopted for project delivery. A significant number of the questionnaire respondents believe that performance of projects could be improved using alternative or hybrid procurement strategies. Recommendations were proffered in order to mitigate or reduce completely the challenges and complexities faced by public project procurement schemes in Nigeria.*

KEYWORDS : *Procurement, performance, construction projects, procurement strategy*

I. INTRODUCTION

Construction projects are time consuming undertakings which are considered successful if delivered on time, to an appropriate budget and to a quality desired by the owner [1]. In recent times, apart from the above mentioned indicators of project success, health and safety, and environmental performance have also become important aspects of project performance. Many literatures and studies of the construction industry have analyzed projects and tried to identify factors affecting project performance. Though the factors found are numerous, a lot of the studies “indicate that procurement related factors have significant effects on construction project performance” [2]. Procurement systems have evolved globally with innovations in process improvement and service delivery. However, these trends have been largely ignored by developing countries. Nigeria has shown a significant regression in procurement processes in comparison to the heavy investment channeled into the sector. “Though different studies have confirmed the use of various types of modern procurement methods for project delivery in Nigeria” [2], the “traditional procurement route which has been widely criticized as an ineffective procurement route is the most often used” [3]. In view of the above, this research seeks to assess the impact of procurement strategies used on construction project performance through the evaluation of public sector construction project’s and investigating the impact of procurement practices on the projects performance.

Nigerian construction industry : The role the construction industry plays in an economy cannot be overemphasized. The Nigerian construction industry has served the Nigerian economy significantly with the creation of direct and indirect employment nationally. From the 80’s till present day, the industry has grown to about 125 times its former size but this growth when put in perspective leaves a lot to be desired. The construction sector accounted for 1.4% of the Nigerian gross domestic product (GDP), in comparison to 1981 where the industry accounted for 5.8%. This decline is mainly due to the country’s GDP growing 495 times in the same period [4].

Despite the construction industry having had an impressive growth rate of above 10% over the past few years, Nigeria still has only 30% of its 193,200 km road network paved. The general infrastructure and amenities in the country has been described as abysmal when compared to the investment that has gone in to the sector [4]. Government funding for new and existing projects has increased steadily [4]. Projects like the national rail revival, renovation of all airports, power station construction and many others have ensured the construction industry remains vibrant. However, unless the effectiveness of the industry is improved the industry will continue to stagnate. Analyzing the factors restraining the industry from achieving the required growth will be crucial in helping improve the performance of the construction projects.

Public sector construction in Nigeria : The performance of the Nigerian public sector procurement has been reassessed in recent times through various professional bodies and government schemes. The establishment of the bureau of public procurement and even the re enactment of the procurement act in 2007 have not improved the level of performance of the industry. Research undertaken to assess the Nigerian procurement sector by have showed weak correlation between methods of procurement used and project performance. With many professionals advocating for use of new procurement methods, there is a need to question the impact if/any of using modern procurement strategies. This research intend on analyzing how effective the procurement strategies used in Nigeria are and the impact measure the impact it has had on performance of projects.

II. A REVIEW OF PROCUREMENT IN NIGERIA

Procurement in construction is carried out through the application of a procurement strategy. The aim of a procurement strategy is to achieve the optimum balance of risk, control and funding for a particular project” [6]. Construction is an endeavor that involves various risk and this risks differ depending on the procurement strategies employed.[7] Classified procurement systems as separated systems, integrated procurement systems, management oriented procurement systems and discretionary system. [8], [9] and [6] have all adopted a similar classification but while [11] relied on a relationship approach in his subdivision, [7], [8] and [6] either added a few additional classes or removed discretionary system [8].

Procurement Selection : Choice of procurement route is influenced by factors like the conventional time-cost-quality model, project strategy, client organization, financial objectives, level of integration of design and construction required, risk management and project constraints [10], [7] and [11] all partially adopt the Nedo’s list of factors which included client requirements of the project such as: Speed, cost certainty, time certainty, flexibility, responsibility, complexity, quality level, risk level, price competition and disputes& arbitration.[11] suggests that [12], [7] and [11] categorization all have deficiency in that they ignored market related and other factors might not apply for all procurement variants, Some of the factors are disputable From the prevalent literatures researched, the factors seem to be either influenced by the client’s requirements to those from external influences, constraints and risks as aptly highlighted by [10]. Client’s selection criteria have varied from the selecting of options that have worked before by experienced clients to reliance on the advice of consultants [9], to single unitary choice by default [2], to one-off/strategic selection methods usually based on experimental models [11].

Procurement Challenges : In Nigeria, the procurement process has largely remained same though there are evidences of the use of many modern procurement methods [3], and [2] . Procurement has also been adversely affected by kidnappings, vandalism, civil unrests and other such factors which have increased the risks associated with procurement. The Nigerian procurement industry is going through a period of revival which resulted in the enactment of Procurement Act in 2007. Public procurement in Nigeria before the enactment of the Procurement Act was based on Treasury Circulars of 1958 which are now ineffective, outdated and encouraged poor procurement practices. Professionals in the Nigerian construction industry have overwhelmingly applauded the development and have described the Act as having the right strategy to help make procurement transparent, accountable and encourage good practice in procurement [13]. However, despite the triumph of enacting a Procurement Act the Nigerian public procurement is still bedeviled by challenges due to the lack of widespread knowledge of the processes, blatant refusal to comply by some , political interference and many other external and internal factors too numerous to mention. Bureau of Public Procurement (BPP) Public sector procurement in Nigeria is currently regulated by the Bureau of Public Procurement (BPP). The World Bank in collaboration with specialist from the Nigerian private sector carried out an assessment which resulted in a Country Procurement Assessment Report (CPAR). The report highlighted some weaknesses in Nigerian public sector procurement.

Project Performance : [14] Describes construction project performance as not only concerned with past performance, but also is about the process of improvement. [15] noted that in construction. Performance measurement has evolved from the scientific measurement of individual work which was

popularized by Frederick Taylor to various adaptations of that system such as; measuring value-added work, continuous time study, and sensor based work measurement [14]. However, most of the systems are more suited to manufacturing and are seldom ever used in construction performance measurement [14]. Project performance in construction is traditionally measured using financial measures [15]. Financial measures though easily measurable, have been criticized as an ineffective measure of performance [14]. This is largely because it measures past performance without necessarily giving indications of the future [15]. Other factors usually considered when measuring performance of construction projects as listed by [15]. Research over the years have attempted to identify systems that can be used to measure performance, some of the widely known systems are:

Balanced Scorecard (BSC): this is a system of measuring performance that was created by Robert Kaplan. This method seeks to measure the performance from four perspectives which in the conceptual model included; the financial perspective, client perspective, growth perspective and the internal business process perspective [14]. Though this system has been widely accepted, [15] remarked that it was too simplistic, not a complete measuring system and could result in the measuring of parameters which might be nice to know but which have no real effect on the project. [15] also added that the model does not account for the possibility of relationship between measures and the supplier's perspective. **Performance Metrics:** this is a system where performance is measured using agreed metrics. This performance measuring system relies on the metrics chosen and as a result an effort to choose the right metrics is key [20] cited from [15]. In recent years, measurement of performance has benefitted from innovations like Benchmarking, Total Quality Management (TQM) and other methods which have been adopted from the manufacturing industry. Performance where highlighted by Sir John Egan's Rethinking Construction. Nick Raynsford, the then UK Minister for Construction in his foreword for a KPI Report on construction observed that the challenge of selecting performance measures has been largely dealt with (KPI Report, 2000). Cost Performance in construction projects is described by [16] as the most important parameter of a project and driving force of overall project success. Traditionally, cost and time performances are regarded as the main performance indicators in measuring construction projects [3]. [4] however states that in developing countries like Nigeria, time performance is considered as it affects the project cost. Cost performance in construction projects are usually considered by using the four cost related measures [16].

Effects of Procurement Strategies on Construction Project Performance : Procurement strategies by their definition in practice identifies the best way for achieving project objectives and as such seems inevitably related to project performance. This view is shared by many authors who have invested time and resources to the understanding of construction project performance. A research conducted by the Chartered Institute of Building (CIOB) in 2010 titled "Procurement in the Construction Industry" found that 87% of the construction participants sampled believe that good procurement is synonymous with successful project performance.

Construction Project Cost Performance in the Nigerian Public Sector : Public sector projects in Nigeria have always rightly or wrongly been criticized for lack of performance by the populace. Construction projects in particular are routinely scrutinized by industry participants and the wider public. The public scrutiny is further exacerbated by the high number of abandoned projects, frequent collapse of buildings, widespread accusations of corrupt practices and the general public distrust of the government. Construction project performance in Nigeria has been plagued by high fluctuation of materials, fraudulent practices and kickbacks [17], inadequate cash flow and financial difficulties [18], and general poor performance [13]. Public sector projects in Nigeria have most-often used traditional procurement strategy and as such it has received the most attention with many researchers blaming the strategy for time and cost overruns in construction projects [2]. [3] in his research on housing projects in Nigeria found the assertions that the traditional strategy leads to cost and time overrun to be untrue for housing projects below the five million thresholds. Despite [3] research, public construction project cost performance and its relationship with the procurement route used is still contentious. The Nigerian Secretary to the Government (SGF) remarked that Nigeria has one of the highest construction cost in the world [5]. Cost performance of construction projects is an area where all stakeholders agree needs improvement. There is also a need for awareness within and outside the industry on the factors affecting the performance.

III. RESEARCH STRATEGY

The research used a simple approach of analyzing data obtained in relation to public sector project in Nigeria. Quantitative data relating to the kpi's originated from findings from the semi-structured questionnaires. Qualitative data was used to confirm or dismiss findings and also enabled ethnographic understanding of the case. The questionnaire was divided into three categories namely; General Information of professionalism of

respondents, acceptance level in practice of different contractual documents, level of exposure to different Procurement routes and their Performance in projects, and finally their perception of hybrid or different procurement routes been used for projects they have been involved in and how effective it would have contributed to project success. The questionnaire was web- based using www.smartsurvey.co.uk and a total number of 41 respondents filled the questionnaire with 4 incomplete responses and 38 complete responses. The responses were from construction professionals in Nigeria that were selected using a snowballing approach, with respondents mainly coming from Facebook, LinkedIn and other online construction forums.

CHART 1: respondent’s acceptance of different contractual procedures based on contractual documents

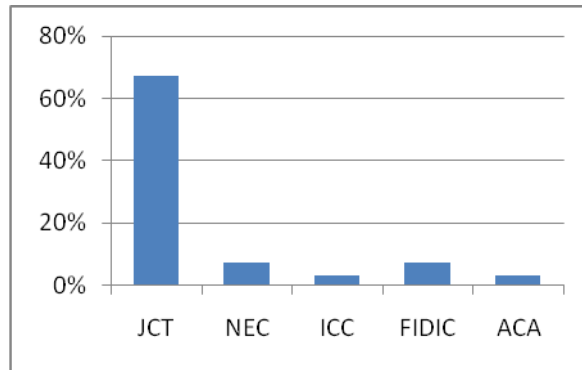


Chart 1 shows a pattern on the acceptance of different contractual procedures based on contractual documents. Responses for tendering options used in public sector procurement indicate that 67.7% of respondents have used JCT while only about 20% of the respondents have used either NEC, ICC, FIDIC or ACA. [17] in his review of procurement in the Nigerian construction industry highlighted the lack of pervasiveness of procurement option as one of the weaknesses of the Nigerian construction industry. [19] in his paper on public procurement challenges, cited lack of knowledge as a problem for developing countries. This highlights the opinion of construction workers in Nigeria that the most traditional contractual document (JCT) is still the most sought after or embraced document for contractual obligations in Nigeria thereby serving as a hindrance factor for other contractual contract documents to be exploited.

CHART 2: How often have you encountered the use of the following procurement methods in public construction projects?

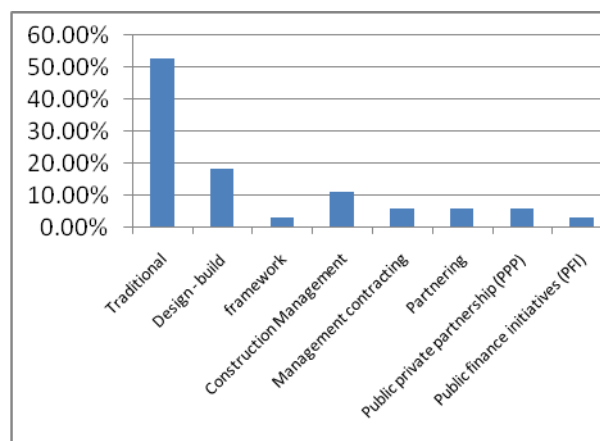


Chart 2 shows a response percentage to the degree of acceptance of different procurement strategies namely the PFI, PPP, Management contracting, Construction management and partnering and the traditional method. The information also highlights the knowledge gap in some procurement strategies that can be adopted in procurement undertakings and also shows that gradually a reasonable acceptance of different contractual options is emerging amongst practitioners and government projects.

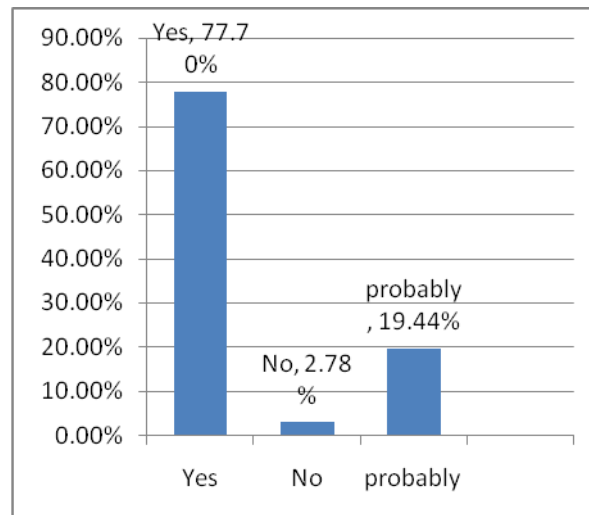
CHART 3: Could some of the project challenges be mitigated by using alternative procurement strategy?

Chart 3 shows the perception of experts or respondents in the industry in seeing alternative procurements strategy as a way to improve project delivery and performance. It was observed that the provisions in which the respondents largely selected 'No' had more 'maybe', which could mean that there is a lack of knowledge on the subject area. Interestingly, the lesser known provisions are those most recommended in reports like 'rethinking Construction' and 'Procurement in the Construction Industry' by CIOB (2010) among other recent procurement reports. Public sector procurement in Nigeria has in recent years made giant strides in terms of regulations and growth. However despite the developments, literatures researched and the data obtained from this questionnaire suggests that there is still a long way to go especially in terms of embracing modern procurement strategies.

IV. CONCLUSIONS AND RECOMMENDATIONS

The conclusions reached from this research work on the impact of procurement strategy on performance of projects are discussed as follows:
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The industry has benefitted from high public sector funding ([4] and [20]), New Procurement Act ([20], [17] and [13]) and availability of labor. Its weaknesses are; large infrastructure deficit ([21] and [18]), inadequate legislation ([13] and [20]). Despite the weaknesses, [4], [5] and [17] among others have identified opportunities such as; infrastructure deficit, new construction bills, political instability [22] and globalization ([23] and [22]). Fraudulent practices and kickbacks [17], and financial difficulties [30] have plagued construction. The Nigerian construction industry needs to take bold steps to address the large Infrastructure deficit and high rate of public sector projects abandonment. Public Sector Procurement in Nigeria the enactment of the governing body as stipulated by the Procurement Act of 2007 needs to be carried out while some areas such as bidding procedures used and some bottlenecks preventing the use of some procurement options need to be reviewed. Public sector clients need to explore the use of modern Procurement strategies for the procurement of projects. The Knowledge gap in terms of the variety of procurement options available to public sector clients needs to be looked into by professionals in the sector. It is the researcher's opinion that further study in these areas is required. Assessing the pervasiveness of modern procurement strategies in the Nigerian construction industry, Procurement and Project performance are topics which though been the subject of a lot of research, could benefit from a lot more research. This is even more pertinent for developing countries like Nigeria with scarce resources, large populations, large infrastructure deficit and relatively less know-how. The subject areas needs further research in order to enable the industry bridge the knowledge gap.

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