

## UTILISATION OF PUBLIC-PRIVATE PARTNERSHIPS PROCUREMENT MODEL FOR INFRASTRUCTURE DEVELOPMENT IN NIGERIA

Usman Muhammad Danjuma, Alamu Bosede Florence and  
Kolawole Asimiyu Folaranmi

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Department of Quantity Surveying,  
The Federal Polytechnic, P.M.B. 55, Bida, Niger State.  
Email: danjumausman12@yahoo.com

### ABSTRACT

*The utilization of Public-Private Partnerships (PPP) procurement model for infrastructural development in Nigeria is being gradually embraced as a number of construction projects are being arranged through this model. This model is being applied more in countries like UK and China among others where drivers for the utilization of the system have been studied. Efforts at investigating critical factors for utilization of this procurement model have not received proper and adequate attention in Nigeria. Therefore, the objectives of the study were to identify the necessary factors for the utilisation of PPP procurement model in Nigeria and to assess the level of utilisation of PPP procurement model in Nigeria. Abuja was used as the study area because of its features as one of the metropolitan cities and Federal Capital Territory of Nigeria where building and engineering construction activities are at its peak, coupled with its soaring population which makes the provision of public infrastructure paramount for the benefits of its growing population. Factors evaluated in the study were those perceived to be critical to the peculiarity of the Nigerian construction industry. Respondents were built environment professionals in government ministries, departments, agencies and parastatals, public and private institutions, financiers of PPP arrangements, contractors and stakeholders involved in PPP projects. Data obtained were analysed using descriptive statistics. It was concluded from the findings that, the necessary factors considered for the utilization of PPP procurement model in Nigeria are accelerated projects development, facilitated creative and innovative approaches as well as technology transfer to local enterprises. Furthermore, the*

*level of utilisation of PPP procurement model has 57.1% of the respondents not involved in PPP procurement model. This may not be unconnected to the fact that the PPP procurement model is yet to be fully embraced for all infrastructure development purposes in Nigeria. It was therefore recommended that, the Infrastructure Concession Regulatory Commission (ICRC) and other relevant stakeholders should carry out sensitization campaign on the knowledge of the benefits of the model among professionals because PPP provides solutions such as finances, expertise and technological know-how to solving the problems encountered by the public sector in providing infrastructure.*

## **INTRODUCTION**

Public Private Partnerships (PPP) have emerged over the last two decades as a popular strategy for infrastructure development by governments worldwide, primarily to meet ever-growing aspirations of its citizens (Garvin, 2009). Thus developed world are increasingly using various forms of PPP in the face of increasing limitation in capital resources (Ibrahim, 2007). National budgets derived from revenue and taxes are often insufficient to meet the huge investment required to build the much needed public infrastructure projects or renew the fast decaying ones (Ahadzi and Bowles, 2004). This indicates the need for an alternate source of finance to capital projects. As PPP offer rapid and effective way of offsetting the capital cost of such projects and of meeting immediate infrastructural needs, it became imperative for Nigerian Government to embrace similar funding regimes (Akintoye, 2006). As a result, the utilisation of PPP in Nigeria is becoming increasingly popular for both new projects and for the operation and management of old facilities (Ibrahim *et al*, 2006). PPP involves partnership between the public and the private sectors for the purpose of delivering facilities and operation of service traditionally provided by the public sector. It involves the private sector partner in design, financing, construction, ownership and operation of public infrastructure. Blackwell (2004) maintained that the main aim of PPP also known as Private Finance Initiative was to deliver public services of high quality which are more cost effective. Garvin (2009) defined PPP as a long-term contractual arrangement between the public and private sector where mutual benefits are sought and where the

private sector provides operating services and puts private finance at risk. PPP is a way of funding capital project without an immediate resort to public purse British Broadcasting Cooperation (BBC, 2011). If properly formulated and managed, PPP can provide a number of benefits to the public sectors such as: alleviating the financial burden on the public sector due to rising infrastructure development cost; allowing risk to be transferred from the public to the private sector; and increasing the “value for money” spent for the infrastructure services by providing more efficient, lower cost, and reliable services (Kwak *et al*, 2009). Efficient project delivery under PPP is however according to Dolo and Jin (2009) complex due to presence of uncertainty and risks affecting virtually all aspects of project life cycle; complex project composition and associated functional integration; complex network of relationship among various stakeholders; multi project operation and increased public participation.

Akintoye *et al* (2003) used interviews to determine how best to achieve success in PFI projects in the UK, Akintoye *et al* (2003) further identified and properly allocating risk, curtailing cost escalation, improving project completion times, introducing innovation and reducing maintenance costs can help lead to successful project. Akintoye *et al* (2003) also identified several challenges to achieving best value such as the high cost of management, lengthy negotiation and complex contractual negotiations; Froud (2003) discussed the risks of Private finance initiative Projects and how the private sector must genuinely assume the risk given to it. Froud (2003) argued that value for money could only be achieved if private sector expertise, innovation, competitive efficiency and risk transfer can overcome the increased transaction contracting and negotiation costs. Ibrahim (2007) identified the public and private risks in PPP arrangement and suggested how best to allocate them.

The public sector has been the main provider of infrastructure which is funded through appropriation acts or budgets. Government all over the world has limited financial resources within its reach to finance increased capital expenditure for improving public services (Li, 2003). This situation has led to a wide gap in the quality and the quantity of infrastructure required

for sustainable economic development. Developed and developing nations of the world, in the last decade, have experienced strong movements towards involvement of the private sector in the provision of public infrastructure and services across a wide range of industries and sector e.g. housing, oil and gas sector, etc. The drivers for the utilization of public private partnerships procurement model have been studied in the countries like the UK and China among others. Effort at investigating critical and necessary factors for the utilisation of this procurement model have not receive adequate attention in Nigeria coupled with areas growing population which makes the provision of public infrastructure necessary for the benefits of its growing population. In view of these therefore, the aim of the study is to assess the utilisation of public-private partnerships (PPP) procurement model for infrastructure development in Nigeria at all levels of government. The objectives of the paper are:

- i. To identify the necessary factors for the utilisation of PPP procurement model in Nigeria.
- ii. To assess the level of utilisation of PPP procurement model in Nigeria.

## **PUBLIC PRIVATE PARTNERSHIPS**

The world has in the last few years witnessed a dramatic increase in the involvement of private sector in the development and funding of public infrastructure (Sapte, 2006). Techniques often referred to as Public Private Partnership (PPPs) are continuously being developed to bring the public and private sectors together for procurement of public services and infrastructure with a view to sharing the benefits and risks associated with such partnerships. The joint approach allows the public and private sector partners to blend their special skills and achieve an outcome which neither party could achieve alone (Akintoye *et al*, 2003). Lane and Gardener (2003) have stated that the primary objective of PPP is to facilitate the delivery of high quality public facilities and services by the private sector over a period of time at a cost that represents value for money whilst at the same time transferring an appropriate level of risk to the private sector. Many academics, public agencies and international organizations have various definitions of PPP in a bid to explain this important model

of project procurement that is being increasingly utilised worldwide. Her Majesty's Treasury (1998) has defined PPP as an arrangement between two or more entities that enables them to work cooperatively towards shared compatible objectives and in which there is some degree of shared authority and responsibility, joint investment of shared resources, shared risk taking and mutual benefits. Her Majesty's Treasury (1998) also described PPP as an arrangement between the public and private sectors with clear agreement on shared objectives for the delivery of public infrastructure or public services by the private sector that would otherwise have been provided through traditional public sector procurement. On the other hand, PPP Unit of Federal Ministry of Finance and Economic Development, Abuja in its condensed version defined it as a cooperative venture between the public and private sectors, built on the expertise of each partner that best meets clearly defined public need through the appropriate allocation of resources, risks and rewards. Kwak *et al* (2009) gave a general definition of PPP as cooperative arrangement between the public and private sectors that involve the sharing of resources, risks, responsibilities, and rewards with others for the achievement of joint objectives. Various types of PPP arrangements which vary in terms of the degree of private sector involvement have been used to procure projects depending on the project objectives and requirements (Kwak *et al*, 2009). The arrangements can also differ in purpose, service scope, legal structure, risk sharing, finance sources and ownership of properties, Kwak *et al* (2009) added. The United Nations Economic Commission for Europe has identified Design, Build Finance and Operate (DBFO), Build Operate and Transfer (BOT) and Design, Construct, Maintain and Finance (DCMF) as the PPP contract family. Froud (2003) espoused the Build-transfer-operate (BTO), Build-operate-transfer (BOT), and Build-own-operate (BOO) as the three main models of PPP being used. Also, a range of other terms as suggested by David *et al* (2003) are used to describe variations of BOT and PFI (private finance initiative) concession types of PPP.

### **Policy and Legislations on Public Private Partnerships in Nigeria**

Every successful Public Policy, Project and programme laid down rules and procedures guiding its effective implementation. Public-

Private partnerships infrastructure delivery according to Dahiru (2011) can produce harmful effects when it is poorly designed and executed. It is a major concern in infrastructure industries especially in Nigeria where the use of PPP project delivery system has become imperative where often the government does not have adequate finances to bridge the critical infrastructure gap and improve investment. Therefore, Infrastructure Concession Regulatory Commission (ICRC) was established to regulate PPP in infrastructure arrangement in the country.

The Infrastructure Concession Regulatory Commission (ICRC) is the body responsible in regulating PPP infrastructure Projects development in Nigeria. It is a legal regulatory framework on PPP to provide the requisite regulatory within which all Ministries, Departments, and Agencies (MDAs) can effectively enter into partnership with Private sector in the financing, construction, operation and maintenance of infrastructure projects. The regulatory framework of the ICRC is categorized into Macro and Micro Level frameworks of PPP arrangement in Nigeria (Dahiru, 2011). The macro level framework can be defined as the collective legislations, institutional and policy framework that governs all PPP in the country.

The ICRC Act according to Dahiru (2011) provides legal provisions governing the establishment of the ICRC to regulate monitor and supervise all PPP contracts in the country. In furtherance of the government effort to facilitate effective PPP arrangement in the country, the commission has subsequently developed the National Policy on PPP to provide clear and consistent process and procedure guides for PPP arrangement (i.e. from project identification, evaluation, selection to procurement, operation, maintenance and performance monitoring). The policy is an elaboration of the Government's commitment and policy arrangement required for the development of PPP projects in Nigeria.

The individuals concerns of actual PPP project structures according to Zarewa (2012) make up the micro level consideration involving fair risk management and sharing of strategies, sound project evaluation methodology, and well

designed contracts with enforcement mechanism. However, a number of important issues related to strict and uniform regulations of PPP concession agreement have been addressed especially section 4(3), 6,10,12,13 and 36 of the legislation involving: consequences when PPP projects are abandoned before the end of the concession period; duration of private ownership and operation; project supervision, the right to use land, construction and operation services; key requirements for the construction, operation and maintenance of the project. However, section 20 of the legislation, which provides the ICRC to take custody of every concession agreement and monitor the compliance with the terms and conditions of the agreement entered into by the government. The section failed to capture other issues such as; environmental protection measures; provision of tariffs, fees, tolls and other charges during operation of the projects, transfer of technology; assurance of compliance by the project company; use of national services and goods and minimum requirement for allocation of risks between the project company and the government. These according to UNCITRAL (2001), should be provided alongside contractual obligations coupled with complex organizational structure.

## **RESEARCH METHODOLOGY**

The use of both primary and secondary data collection tools was employed. The secondary tool was extensive review from related literature. Structured questionnaire was the primary data collection tool adopted and administered to professionals in the area of study. These include professionals in government ministries, departments, agencies and parastatals, public and private institutions, financiers of PPP deals, contractors and stakeholders involved in PPP projects. The questionnaire designed was divided into two (2) sections A and B. Section B comprised demographic information of respondents which includes organisation types, designation of respondents, academic qualifications, years of professional experience, types of construction engaged in and number of projects engaged in. Section B related to the research objectives in respect to the identified necessary factors for the utilization of PPP procurement model and the level of utilization of PPP procurement model for infrastructure development in Nigeria. Questions were asked on a

5-point likert scale rating with 5 being the highest of the rating. Purposive sampling technique was adopted in administering the questionnaire to those respondents directly involved in PPP projects in the study area. Sixty (60) copies of questionnaire were administered to purposively selected professionals. A total of forty-nine (49) copies representing 81.67 percent were collected and found suitable for the analysis. The data collected were presented in tables and analysed using descriptive statistics.

## RESULTS AND DISCUSSION

**Table 1: Characteristics of Respondents**

Item	Category	Frequency(n)	Percentage%
Respondent's designation	Directors	26	53
	Partners	12	24
	Operational staff	11	23
	<b>Total</b>	<b>49</b>	<b>100</b>
Organizational types	Public organization	18	37
	Private organization	31	63
	<b>Total</b>	<b>49</b>	<b>100</b>
	Highest academic qualification	HND	21
	B.Tech/B.Sc	13	27
	M.Tech/M.Sc	12	24
	Others	3	6
	<b>Total</b>	<b>49</b>	<b>100</b>
Years of professional experience	0-5 years	21	43
	6-10 years	15	31
	11-15 years	2	4
	16-20 years	6	12
	Above 20 years	5	10
	<b>Total</b>	<b>49</b>	<b>100</b>
Types of construction engaged in	Building works	14	29
	Civil works	8	16

	Building and civil works	8	16
	Mechanical and electrical works	19	49
	<b>Total</b>	<b>49</b>	<b>100</b>
Number of projects engaged in last 10 years (2009-2018)	0-5 projects	23	47
	6-10 projects	14	29
	11-15 projects	6	12
	16-20 projects	2	4
	Above 20 projects	4	8
	<b>Total</b>	<b>49</b>	<b>100</b>

**Source:** *Authors Fieldwork (2019)*

The type of construction projects engaged in showed that 29% of the respondents were engaged in building works only, 16% were engaged in civil works only, 16% also accounted for respondents engaged in building in mechanical and electrical works.

In respects of numbers of projects engaged in or executed within the last 10 years, 47% accounted for 0-5 projects, 29% represent 6-10 projects, 12% have 11-15 projects, 4% also have 16-20 projects while 8% represent above 20 projects. Therefore, it can be deduced that, with the respondent's designation of directors, partners and operational staff coupled with their years of professional experience and the number of construction projects engaged in or executed in the last ten years, their responses can be accurately relied upon.

**Table 2: Necessary factors for the Utilisation of PPP Procurement Model in Nigeria**

Factors	Mean	SD	Ranking
Accelerate project development	5.59	0.36	1
Facilitate creative and innovative approaches	4.33	0.65	2
Technology transfer to local enterprises	4.30	2.07	3
Solve the problem of public sector restrain	4.28	0.76	4
Provide an integrated solution for public infrastructural service	4.27	0.86	5
Reduce the total project cost	4.05	0.86	6
Reduce public sector administrative cost	3.91	1.06	7
Non recourse or limited recourse to public	3.67	1.06	8
Transfer risk to the private sector	3.33	1.14	9

**Source:** *Authors Fieldwork (2019)*

Table 2 shows necessary factors for the utilisation of PPP procurement model in Nigeria. The accelerated project development, facilitated creative and innovative approaches and technology transfer to local enterprises were ranked 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> with mean scores of 5.59, 4.33 and 4.30 respectively. Factors such as solution to the problem of public sector restrain, provision of an integrated solution for public infrastructure services and reduction in total projects cost were ranked 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> and have mean scores of 4.28, 4.27 and 4.05 respectively.

The least factors considered are reduction in public sector administrative cost, non-recourse or limited recourse to public funding and transfer risk to the private sector which were ranked 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> with mean score of 3.91, 3.67 and 3.33 respectively. Therefore, the main factors necessary for the utilization of PPP procurement model in Nigeria are accelerated project development, facilitated creative and innovative approaches and technology transfer to local enterprises; as these factors will enhance infrastructure development in Nigeria.

**Table 3: Utilisation of PPP Procurement Model in Nigeria.**

	Frequency	Percentage	Valid percentage	Cumulative percentage
Yes	21	42.9	42.9	42.9
No	28	57.1	57.1	100.0
Total	49	100.0	100.0	

**Source:** *Authors Fieldwork (2019)*

From table 3 above, utilisation of PPP procurement model in Nigeria shows that, out of forty nine (49) respondents, 21 representing 42.9% were engaged and in and involved in PPP procurement model in executing construction projects while 57.1% of the respondents were not involved in PPP procurement model.

Therefore, PPP procurement model and its engagement is yet to be fully utilized in Nigeria, as most respondents were not involved in PPP procurement model in executing construction projects.

## CONCLUSION

The research revealed the necessary factors considered for the utilization of PPP procurement model in Nigeria as accelerated projects development, facilitated creative and innovative approaches as well as technology transfer to local enterprises. The research also concluded that, level of utilisation of PPP procurement model is low as most respondents have not been involved in PPP procurement model. This may not be unconnected to the fact that, the PPP procurement model is yet to be fully embraced for all infrastructure development purposes in Nigeria.

## RECOMMENDATIONS

1. The Infrastructure Concession Regulatory Commission (ICRC) and other relevant stakeholders should carry out sensitization campaign on the importance of Private participation in provision of public services through advertisement, seminars, and workshops. They should also ensure that User fees are fixed to reflect cost of services for any PPP project.

2. The government and other relevant bodies should pursue with all seriousness the knowledge of the benefits of the model among professionals because PPP provides solutions such as finances, expertise and technological know-how to solving the problems encountered by the public sector in providing infrastructure.

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