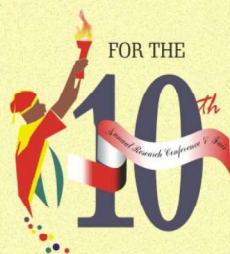




**UNIVERSITY OF LAGOS,
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BOOK OF PROCEEDINGS



FOR THE

**UNILAG ANNUAL RESEARCH
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Theme:

**Implementing New Research
Strategies for National
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UTILIZATION OF PUBLIC PRIVATE PARTNERSHIP (PPP) FOR SOCIAL INFRASTRUCTURE PROVISION IN NIGERIA

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ABSTRACT

Public Private Partnership (PPP) has been widely used to deliver public infrastructure and services in most developed countries like UK, Australia and Canada. However in Nigeria, the implementations of PPP for social infrastructure have not been fully adopted despite the benefit of the procurement system in terms of the usage of private sector finances to provide public infrastructure. This study thus assesses the utilization of PPP for social infrastructure in Nigeria. Cross-sectional research design is used for this study and the population comprises of professionals involved in the execution of PPP projects, government agencies and parastatals, public and private institutions, and contracting organisation. Convenience sampling technique method is used for this study of which 68 questionnaires were distributed and 49 was returned and used for the analysis, given an average response rate of 72%. The study shows that the level of utilisation of PPP procurement system is very low as most respondents have not been involved in PPP procurement system in Nigeria, this is attributed to the fact that this procurement system is yet to be fully embraced and adopted as a means of providing critical infrastructural need although professionals are quite aware of the procurement system.

Keywords: *Development, Privatisation, Public Private Partnership, Social infrastructure*

INTRODUCTION

The arduous search for efficiency in public service delivery and capital intensive of most government projects has led to a number of forms of association between public and private sectors (Regan, Smith and Love, 2012). This form of association is known as Public Private Partnership (PPP). Thus, PPP procurement system is collaboration between the public and private sector to provide high capital intensive infrastructural project using private finance of which the spent fund is realized from the revenue generated by the use of the completed facility over a period of years (Morley, 2002). PPP signifies the pivotal role played by both the public and private sectors which is different from privatization. PPP is an integral part of most Federal and State Government procurement method in many countries including Nigeria. Javed, Lam and Chan (2012) opined that, PPP has been used in more than 85 countries around the world for procuring both social and economic infrastructure projects. This project includes power, transportation, water supply and disposal, telecommunications, oil and gas, mining, schools, hospitals, and military training facilities (Zhang and AbouRisk, 2006). This involvement of a private partnership scheme with the government evolves from the fact that the private sector is believed to be more efficient and proactive in the management of resources.

The parties involved with PPP project are the client, concession contractor and constituent members. The various forms of PPP are used interchangeably and interpreted differing. For instance Private Finance Initiative (PFI) is a form of PPP used in UK, Japan and Malaysia, while World Bank used Private Participation in Infrastructure (PPI). However, the government with the most developed PPP markets used it to enable the public sector to achieve value for money (Kwak, Chih and Ibbs, 2009).

Many researchers, has argued on the set back of PPP because, it has led to cost and time overruns and complexity of projects (Kwak et al, 2009; Regan et al, 2012). However PPP provides values for money through effective output specification (Javed et al, 2012). The cardinal point in PPP procurement method is for the government to transfer risk to the private sector (Chan et al, 2010).

To show the level of acceptance and the prominence of PPP procurement system globally, the World Bank estimated that an investment of US \$ 890 billion was made globally in public – private infrastructure projects during 1990-2003. The leading sectors have been telecom (47%) and energy (33%), followed by toll-roads (8%), water and sanitation (5%), railways (3%), seaports (2%) and airports (2%). An evaluation of the use of PPP in the provision of public infrastructure in the UK shows that about 80 per cent of the projects were completed on time and within budget. This performance is therefore responsible for it adoption in South Africa, Canada, Asia and several developing countries with positive results. However, Metro (2008) was of the opinion that PPP are usually multi-phased and could be lengthy and costly. It involves the use of PPP experienced legal, technical and financial advisors, also, it takes about two years to complete the PPP agreement negotiations from the time a Request for Expressions of Interest (RFEI) or a Request for Information (RFI) is issued.

In Nigeria, the Federal Government is moving increasingly into a private sector driven economy and one of the major issues to facilitate the effective implementation of such a policy is to put in place necessary enabling laws to regulate the PPP contractual arrangements. The PPP procurement methodology as reported by the GLG (2007) is increasingly being used in different sectors of the Nigerian economy. Governments at various levels (i.e. federal, state and local) are increasingly utilising the PPP methodology owing to the realisation in government circles that the private sector is better able to operate and manage businesses and the need for government to utilise its scarce resources in other areas. For instance, in Lagos State, the PFI/PPP procurement method has been used in the generation of power, management of waste disposal, highway and street cleaning and maintenance, etc. This method has also been employed in the provision of infrastructure in Lagos State, and the state has been exploring avenues for cooperating with private sector entities for the development, upgrading, rehabilitation, operation and management of state roads, bridges and highway and other pieces of infrastructure, (GLG, 2007).

FRAMEWORK OF PUBLIC PRIVATE PARTNERSHIP (PPP)

Public-Private Partnerships involves the public and private working in co-operation and partnership with each other (Harris, 2003), it is essentially a partnership between public sector organizations and private sector investors and business for the purpose of designing, planning, financing, constructing, providing and/or operating infrastructure, facilities or related services.

Successful public private partnerships build on the experience of each partner to meet clearly defined needs and provide a net benefit (or value for money) to the general public through the appropriate allocation of resources, risks and rewards, Leiringer (2003). It involves unbundling the costs and the risks inherent in delivering the project and allocating them to the partner best able to absorb and mitigate them, Pryke and Ouwerkerk (2003). The ability of the public and private sector partners to efficiently and effectively mitigate each risk governs the allocation of each risk. PPP is another form of best sourcing that can be used to work with private sector to deliver services; particularly services that require the development of new physical assets. PPP therefore entails long-term partnering relationships between the public and private sector to deliver services. It is a new approach that public sector is adopting to increase private sector involvement in the delivery of public services. With PPP, the public sector will focus on acquiring services at the most cost-effective basis, rather than directly owning and operating assets (Oladapo, 2008). For example, if PPP is used to develop a water treatment plant, the private sector will be engaged to not only construct the plant, but also to design, operate, maintain and raise financing to build the plant to supply water to the public agency. Under PPP, the private sector can look forward to providing a wider range of services and over a longer contract period, usually between 15 to 30 years (Harris, 2003). Through closer collaboration with the private sector, public services can be delivered in a more value-for-money way by making optimal use of the public and private sectors' expertise, resources and innovation to meet public needs effectively and efficiently. The reason for establishing such partnerships vary but generally involve the financing, design, construction, operation and maintenance of public infrastructure, facilities and services. In other words, public private partnerships are not just about the private sector financing capital projects in return for an income stream, but also make use of private sector skills and management expertise to deliver and operate public projects more efficiently over their lifetime. The underlying logic for establishing partnerships is that both the public and the private sector have unique characteristics that provide them with advantages in specific aspects of service or project delivery (Leiringer, 2003). The most successful partnership arrangements draw on the strengths of both the public and private sector to establish complementary relationships. While the roles and responsibilities of the private and public sector partners may differ on individual servicing initiatives, the overall role and responsibilities of public sector would not change. PPP is one of a number of ways of delivering public infrastructure, facilities and related services. It is not a substitute for strong and effective governance and decision making by government. In all cases, government remains responsible and accountable for delivering services and projects in a manner that protects and furthers the public interest, Chan *et al*, (2008).

RESEARCH METHOD

Cross-sectional research design is used for this study and the population comprises of professionals involved in the execution of Public Private Partnerships deal projects, either during the initial stages, construction stages, maintenance and operating stages. Such as government agencies and parastatals, public and private institutions, financiers of PPP deals, contractors and all stakeholders involved in this type of procurement system. Convenience sampling technique is used for this study. A closed ended questionnaire was used to seek the opinion of the construction professional on their personal data and to obtain information on PPP projects. The questionnaire used a six point Likert scale to measure a range of opinion from "not applicable" to "very important". 68 copies of the prepared questionnaires were distributed,

49 completed copies were returned and used for the analysis. The average response rate to the questionnaires was 72%. This response rate is considered adequate according to Oladapo (2007). The data were analysis using Social Statistic for Social Sciences (SPSS) package 17th edition. The statistic tools used are descriptive statistic via percentage, ranking, average percentage, Chi square, and mean item score (MIS) was used to analyze the data using this formula:

$$\text{Mean score} = \frac{6n_6 + 5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{6(n_6 + n_5 + n_4 + n_3 + n_2 + n_1)}$$

Where: n_1 = number of respondents who answered not applicable; n_2 = number of respondents who answered not important; n_3 = number of respondents who answered rarely important; n_4 = number of respondents who answered sometimes important; n_5 = number of respondents who answered important; n_6 = number of respondents who answered very important

RESULTS AND FINDINGS

Demographic information of respondents

Table 1 shows that, 39% are respondents from public organisation while 61% were private organisation respondents. The table furthers shows that, of the 49 respondents 74% are operational staff in their various organisations, 10% are partners, 6% principal partners, while director and MD/CEO represents 6% and 4% respectively of the respondents` designation. In terms of highest academic qualification, respondents with B.Tech/B.Sc ranked highest with 49% while HND and M.Sc followed with 33% and 18% respectively. Industrial experience of respondents revealed that 41.0% of the respondents have between 0 – 5 years of experience, 29% has 6 – 10years, 14% has 11 – 15 years while 16 – 20 years and above 20 years of industrial experience amounted to 8% of the respondents. 43% of the respondents are engaged in building and civil work construction, 27% are engaged in building works only, 16% accounted for respondents engaging in mechanical and electrical works while 14% are engaged in civil works only. With respect to the number of projects executed within the last five years; 29% accounted for 6 – 10 projects, 22% represents 11 – 15 and 0 – 5 while 8% and 4% represents 21 – 25 and above 25 projects executed respectively.

Table 1: Characteristics of respondents

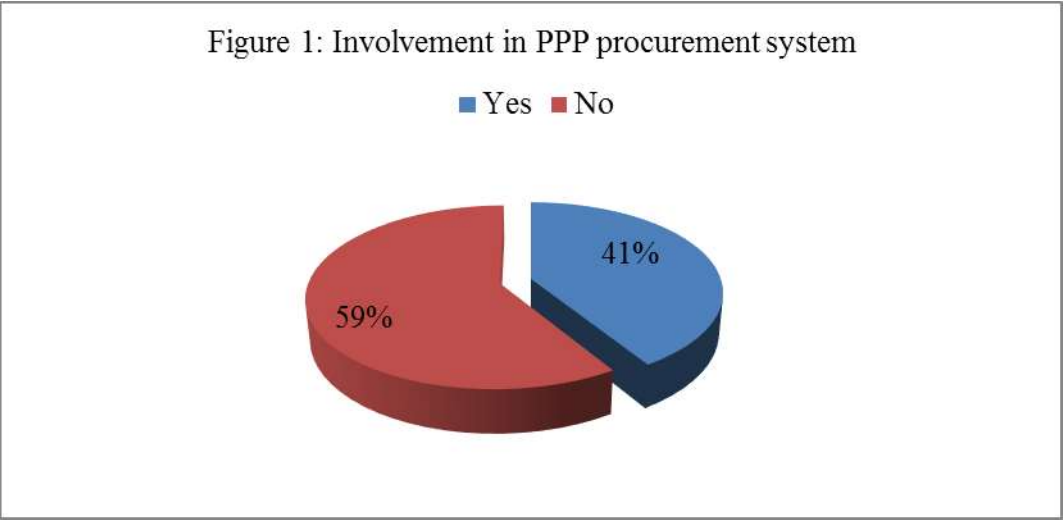
Item	Category	Frequency (n)	Percentage (%)
Organisation types	Public organisation	19	39
	Private organisation	30	61
	Total	49	100
Respondent's designation	MD/CEO	2	4
	Director	3	6
	Principal Partner	3	6
	Partner	5	10
	Operational staff	36	74
	Total	49	100
Highest academic qualification	HND	16	33
	B.Tech/B.Sc	24	49
	M.Sc	9	18
	Total	49	100
Years of industrial experience	0 - 5 years	20	41
	6 - 10 years	14	29
	11 - 15 years	7	14
	16 - 20 years	4	8
	Above 20 years	4	8
	Total	49	100
Types of construction engaged in	Building works only	13	27
	Civil works only	7	14
	Building and Civil works	21	43
	Mechanical and Electrical works	8	16
	Total	49	100
Number of projects involved in the last 5 years (2003 - 2008)	0 – 5	11	22
	6 – 10	14	29
	11 – 15	11	22
	16 – 20	7	14
	21 – 25	4	8
	Above 25	2	4
	Total	49	100.0

HND =Higher National Diploma; B./Tech. =Bachelor of Technology

Level of Utilization of PPP Procurement System

Involvement in PPP procurement system: Figure 1 presents the involvement of respondents in PPP procurement system. This data reveals that, 59% of the respondents have not been involved in PPP while only 41% of the respondents have been involved in PPP procurement system. It

shows most of the stakeholders are not fully involved in PPP due to the lack of adoption and use of PPP procurement method in Nigeria.



Number of PPP projects involved/handled

Figure 2 presents the evaluation of the number of projects procured/executed using PPP procurement. Out of 20 respondents who have been involved in PPP projects; respondents involved in 1 project were the highest with 55% while 20% of the respondents have been involved in 3 projects, 15% and 5% represents involvement in 2 and 4 projects respectively while 5% of the respondents have been involved in above 5% which is the least. It clearly shows the low rate of involvement of the key players of construction industry in the use and implementation of PPP projects.

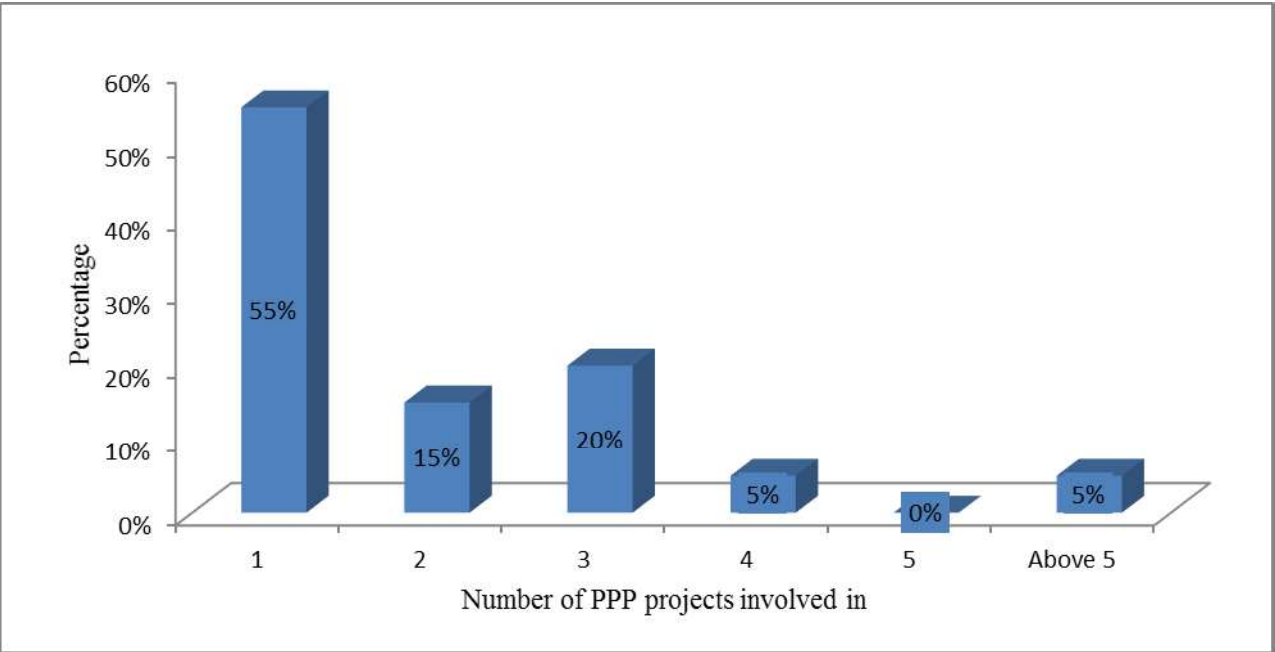
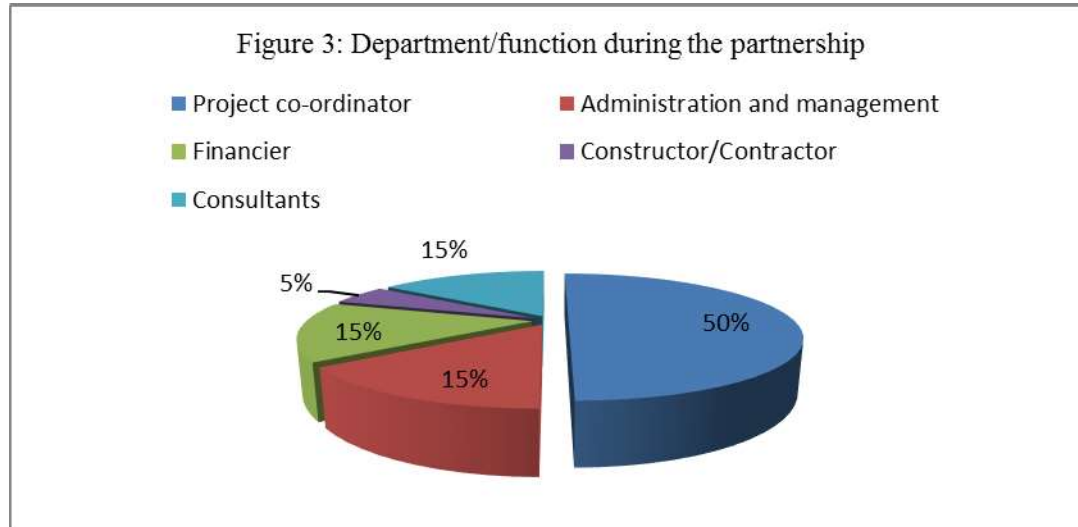


Figure 2: Number of PPP projects involved/handled

Department/functions during the partnership

Figure 3 displays the department / functions of the respondents during the PPP partnership system. It can be seen that 50% of the total of 20 respondents were project coordinators, 15% of the respondents act as financier, consultant and in administration and management capacity while the least of all were constructor/contractors with 5% of the total respondents.



HYPOTHESIS 1: The result of the hypothesis testing in respect of level of utilization of PPP projects is presented in Table 2 below.

Table 2: Chi-Square Test Results of the Level of Utilisation of PPP procurement System.

Variable	χ^2_{cal}	χ^2_{tab}	DF	P-value	Sig.	Decision
Involvement in PPP procurement system	1.65	5.02	1	0.20	NS	Accept H_0
Number of PPP projects handled	72.10	12.83	5	0.00	S	Accept H_1
Function during the partnership	12.00	11.14	4	0.017	S	Accept H_1

Results indicated in Table 2 above shows that for the involvement in PPP procurement system, the calculated chi-square value ($\chi^2_{cal} = 1.65$) is lower than that tabulated value ($\chi^2_{tab} = 5.02$) hence the result is not significant. It involves accepting the null hypothesis; this infers that most respondents have not been involved in PPP procurement in Nigeria. The finding of this research can be attested to the fact that PPP procurement system and its engagement are still very new and that the practice of the procurement system is yet to be fully embraced in Nigeria. Furthermore, there has been little or no sensitization and knowledge of the procurement system among our professionals for people to be able to embrace it.

Similarly, results in Table 2 above infer that for the number of PPP projects executed and functions of the respondents during the partnership, the calculated chi-square values ($\chi^2_{cal} = 72.10, 12.00$) are greater than the tabulated values ($\chi^2_{tab} = 12.13, 11.14$) hence the results are significant. This infers accepting the alternative hypothesis which state that most project undertaken are more than five numbers and most respondents have functioned as project co-coordinators. From the drawn inference, it can be deduced that the few people who have been

involved in the use of PPP procurement system have been given the opportunity of executing the bulk of the projects, clients or consultants therefore prefers to deal with someone in their own opinion who have been involved in this procurement system than to use a new individual who is not so conversant with it. This can be substantiated with the fact that continuous involvement in a certain procurement system tends to give confidence to the individual and it increases that capability of such person in the execution of projects with similar procurement system.

Type of Project in which PPP procurement is suitable

Table 3 shows the mean score of the ranking of respondents with respect to types of projects suitability for execution using PPP procurement system. From the ranking it was observed that transport which include rail, road and airport construction was ranked highest in the overall ranking with a mean score of 0.79 followed closely by infrastructural provision such as electricity, water, etc with a mean of 0.72 while environment and natural resources was ranked 3rd with a mean of 0.66. The following were ranked least; leisure tourism and cultural, real estate and construction, education (school, university construction) with a mean of 0.61, 0.60 and 0.59 respectively.

Table 3: Evaluation of the suitability of Projects for execution using PPP and chi-square test analysis

PROJECT TYPES	MIS	R	$\chi^2_{cal.}$	$\chi^2_{tab.}$	DF	P value	Sig.	Decision
Transport (road, airport, railway)	0.79	1	17.84	11.14	4	0.001	S	Accept H ₁
Infrastructural (electricity, water, etc)	0.72	2	13.08	12.83	5	0.023	S	Accept H ₁
Environmental and natural resources	0.66	3	12.59	12.83	5	0.028	NS	Accept H ₀
Health and social services	0.65	4	13.57	12.83	5	0.019	S	Accept H ₁
Leisure, tourism and cultural	0.61	5	12.10	12.83	5	0.033	NS	Accept H ₀
Real estates and construction	0.60	6	6.41	11.14	4	0.171	NS	Accept H ₀
Educational (school, university)	0.59	7	11.12	12.83	5	0.049	NS	Accept H ₀

MIS = Mean Item Score; R= Rank

Infrastructural projects, transportation, health and social services have calculated chi-square values ($\chi^2_{cal.}$ = 13.08, 17.84, 13.57) greater than their tabulated chi-square value (χ^2_{tab} = 12.83, 11.14, 12.83) hence the result is significant. Therefore, the alternative hypothesis is accepted which infer that infrastructural projects, transportation, health and social services are suitable for PPP execution. This inference can be hinged on the fact that the above stated projects involve huge financial outlay, therefore is it best fit for the private sector to bring in their expertise and financial capability in ensuring that these projects are effectively executed. Educational, real estate construction, recreational and environmental and natural resources

projects are not suitable for PPP execution. This can be buttressed with the fact that these projects are usually projects which can be executed by the government or any private individual successfully without and assistance or intervention from a third party, corporation or person

CONCLUSION AND RECOMMENDATION

The level of utilisation of PPP procurement system is very low as most respondents have not been involved in PPP procurement system in Lagos State; this is attributed to the fact that this procurement system is yet to be fully embraced although there is an appreciable knowledge among professionals of the procurement system. Projects most suitable for execution using PPP procurement system include infrastructural projects e.g. electricity, water and telecommunication, transportation, health and social services, while educational, real estate construction, recreational and environmental and natural resources projects are not.

This study has critically examined and evaluates Public-Private-Partnerships procurement system in Lagos state, Nigeria. The result of the survey shows that this procurement system is being used in the execution of projects in the study area of the research. The increase in population and the resulting demand and scramble for limited facility and public social infrastructure is a factor that should foster the adoption of PPP procurement method which enables the public and private sector the opportunity of being engaged in the provision of infrastructures by the bringing into being their various levels of expertise and specialization, however the low utilisation of this procurement system is hinged to the government not so fully disposed to its use.

PPP procurement method is best suitable for infrastructural and road project. This gives the private sector the opportunity to be involved in the provision of social amenities for the public which can also translates to giving back to the public which has given much to them. Government or public sector should adequately involve the private sector in the provision of infrastructures and transport related project by the use of PPP in procuring such project. PPP procurement offers an integrated solution to public infrastructural services, it solves the problem of public sector restrain and it effectively transfer risks to the private sector; as a result there should be a shift from the conventional procurement system to a more challenging and better promising method which will enable governments and municipalities in concentrating on other services which is equally of importance to the populace.

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